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Apr 79

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PREFACE

This report was prepared by personnel of the New York district of the Water Resources Division of the U.S. Geological Survey under the supervision of R. J. Dingman, succeeded by L. A. Martens, District Chief, and J. E. Biesecker, Regional Hydrologist, Northeastern Region. It was done in cooperation with the State of New York and with other agencies.

This report is one of a series issued by State. General direction for the series is by J. S. Cragwall, Jr., Chief Hydrologist, U.S. Geological Survey, and G. W. Whetstone, succeeded by Philip Cohen, Assistant Chief Hydrologist for Scientific Publications and Data Management.

Data for New York are in two volumes as follows:

Volume 1. New York excluding Long Island
Volume 2. Long Island

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PB 296419

Water Resources Data for New York

Volume 1. New York excluding Long Island

U.S. GEOLOGICAL SURVEY WATER-DATA REPORT NY-78-1

WATER YEAR 1978

Prepared in cooperation with the State of
New York and with other agencies

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U. S. DEPARTMENT OF COMMERCE
SPRINGFIELD, VA. 22161

CALENDAR FOR WATER YEAR 1978

1977

OCTOBER

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1978

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1979

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WATER RESOURCES DATA FOR NEW YORK, 1978
Volume 1.--New York excluding Long Island

INTRODUCTION

Water resources data for the 1978 water year for New York consist of records of stage, discharge, and water quality of streams; stage, contents, and water quality of lakes and reservoirs; water quality of precipitation; and water levels and water quality of ground-water wells. This volume contains records for water discharge at 188 gaging stations; stage only at 22 gaging stations; stage and contents at 21 lakes and reservoirs; water quality at 67 gaging stations, 10 precipitation stations, and 10 wells; and water levels at 44 observation wells. Locations of these sites are shown on figures 6A, 6B, and 6C. Also included are data for 144 crest-stage, 20 low-flow, and 7 water-quality partial-record stations. Additional water data were collected at various sites not involved in the systematic data-collection program and are published as miscellaneous measurements and analyses. These data together with the data in Volume 2 represent that part of the National Water Data System operated by the U.S. Geological Survey in cooperation with State, Federal, and other agencies in New York.

Records of discharge and stage of streams, and contents or stage of lakes and reservoirs were first published in a series of U.S. Geological Survey water-supply papers entitled "Surface Water Supply of the United States." Through September 30, 1960, these water-supply papers were in an annual series and then in a 5-year series for 1961-65 and 1966-70. Records of chemical quality, water temperatures, and suspended sediment were published from 1941 to 1970 in an annual series of water-supply papers entitled "Quality of Surface Waters of the United States." Records of ground-water levels were published from 1935 to 1974 in a series of water-supply papers entitled "Ground Water Levels in the United States." Water-supply papers may be consulted in the libraries of the principal cities in the United States or may be purchased from the Branch of Distribution, U.S. Geological Survey, 1200 South Eads Street, Arlington, VA 22202.

For water years 1961 through 1974, streamflow data were released by the Geological Survey in annual reports on a State-boundary basis. Water-quality records for water years 1964 through 1974 were similarly released in separate reports.

Beginning with the 1975 water year, water data for streamflow, water quality, and ground water are published in official Survey reports on a State-boundary basis. These official Survey reports carry an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this volume is identified as "U.S. Geological Survey Water-Data Report NY-78-1." For archiving and general distribution, the reports for water years 1971-74 are also identified as water-data reports. These water-data reports are for sale, in paper copy or in microfiche by the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161.

Additional information, including current prices, for ordering specific reports may be obtained from the district chief at the address given on the back of the title page or by telephone (518) 472-3107.

COOPERATION

The U.S. Geological Survey and organizations of the State of New York and other agencies have had cooperative agreements for the systematic collection of water records since 1900. Organizations that assisted in collecting data included in Volume 1, water year 1978, through cooperative agreement with the Survey are:

New York State Department of Environmental Conservation
New York State Department of Transportation
New York State Education Department
County of Chautauqua, Planning Department
County of Cortland, Planning Department
County of Dutchess
County of Monroe, Water Authority
County of Onondaga, Department of Public Works
County of Onondaga, Water Authority Commission
County of Putnam, Board of Supervisors
County of Ulster, County Legislature
County of Westchester, Department of Public Works
City of Albany, Department of Water and Water Supply
City of Auburn
City of New York, Bureau of Water Resources Development
City of New York, Department of Environmental Protection
City of Rochester
Town of Brighton
Town of Clarkstown
Town of Warwick
Town of Waterford, Board of Water Commissioners
Village of Nyack
Board of Hudson River-Black River Regulating District
Central New York State Parks Commission
Oswegatchie River-Cranberry Reservoir Commission
Power Authority of the State of New York
Susquehanna River Basin Commission

Assistance in the form of funds for collecting records at gaging stations published in this report was also given by the U.S. Army Corps of Engineers, the Soil Conservation Service, the Environmental Protection Agency, and the St. Lawrence Seaway Development Corp.

The following organizations aided in collecting records:

Municipalities of Batavia, Canandaigua, Cortland, Jamestown, Lancaster, Mamaroneck, Oneida, Plattsburgh, Rochester, Rome, Rye, Syracuse, Tarrytown, and Yonkers; Cornell University; Central Hudson Gas and Electric Corp.; Indian River Co.; New York State Electric and Gas Corp.; Niagara Mohawk Power Corp.; Rochester Gas and Electric Corp.; Orange and Rockland Utilities, Inc.; and Power Authority of the State of New York.

Organizations that supplied data are acknowledged in station descriptions.

HYDROLOGIC CONDITIONS

The 1978 water year began with surface-water discharges and ground-water levels considerably above normal; the water year ended with surface-water discharges normal or above and with normal ground-water levels.

Streamflow at all four index stations (Susquehanna River at Conklin, Hudson River at Hadley, Mohawk River at Cohoes, and West Branch Oswegatchie River near Harrisville) increased to the above normal (within the highest 25 percent of record for the month) range in August or September 1977, and continued above normal through mid-winter 1978. Normal streamflow, which began in mid-winter, occurred through most of the remainder of the water year; however, at various times during this period, above normal and below normal discharges were recorded.

Monthly mean streamflow at the four index stations ranged from as much as 15 times the median for the month (in October at Susquehanna River at Conklin) to as little as one-half the median for the month (in July at Hudson River at Hadley).

Flooding occurred in southeastern New York in early November and again in early January in some areas. In January, the snowpack and the water content of the snowpack increased to considerably above normal, creating a widespread flood potential. These above-normal conditions and the resultant flood potential continued through the winter. However, the winter flooding did not occur, and beginning in March, weather conditions ideal for gradual melting of the snow began and continued until the snowpack was gone.

The level of Lake Champlain (Richelieu River, a tributary to St. Lawrence River) at Rouses Point was above average through April. Except for the above average level at the end of June, monthend levels were near average for the remainder of the water year.

Ground-water levels throughout most of the State continued in the above normal (within the highest 25 percent of range of water levels) range from the beginning of the water year to the end of January. Beginning in February, and continuing through August, monthend levels ranged from above normal to normal in various areas. However, by the end of September, ground-water levels declined to a normal level throughout the State.

DEFINITION OF TERMS

Terms related to streamflow, water quality, and other hydrologic data, as used in this report, are defined below. See also the table for converting inch-pound system units to International System of units (SI) on the inside of the back cover.

Acre-foot (AC-FT, acre-ft) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equivalent to 43,560 cubic feet or about 326,000 gallons or 1,233 cubic meters.

Algae are mostly aquatic single-celled, colonial, or multi-celled plants, containing chlorophyll and lacking roots, stems, and leaves.

Algal growth potential (AGP) is the maximum algal dry weight biomass that can be produced in a natural water sample under standardized laboratory conditions. The growth potential is the algal biomass present at stationary phase and is expressed as milligrams dry weight of algae produced per liter of sample.

Aquifer is a geologic formation, group of formations, or part of a formation that contains sufficient saturated permeable material to yield significant quantities of water to wells and springs.

Artesian means confined and is used to describe a well in which the water level stands above the top of the aquifer tapped by the well. A flowing artesian well is one in which the water level is above the land surface.

Bacteria are microscopic unicellular organisms, typically spherical, rodlike, or spiral and threadlike in shape, often clumped into colonies. Some bacteria cause disease, others perform an essential role in nature in the recycling of materials; for example, by decomposing organic matter into a form available for reuse by plants.

Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. They are characterized as aerobic or facultative anaerobic, gram-negative, nonspore-forming, rod-shaped bacteria which ferment lactose with gas formation within 48 hours at 35°C. In the laboratory these bacteria are defined as the organisms which produce colonies within 24 hours when incubated at 35°C ± 1.0°C on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal coliform bacteria are bacteria that are present in the intestines or feces of warm-blooded animals. They are often used as indicators of the sanitary quality of the water. In the laboratory they are defined as all organisms which produce blue colonies within 24 hours when incubated at 44.5°C ± 0.2°C on M-FC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal streptococcal bacteria are bacteria found also in intestines of warm-blooded animals. Their presence in water is considered to verify fecal pollution. They are characterized as gram-positive, cocci bacteria which are capable of growth in brain-heart infusion broth. In the laboratory they are defined as all the organisms which produce red or pink colonies within 48 hours at 35°C ± 1.0°C on KF medium(nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Bed material: See Bottom material.

Biochemical oxygen demand (BOD) is a measure of the quantity of dissolved oxygen, in milligrams per liter, necessary for the decomposition of organic matter by microorganisms, such as bacteria.

Biomass is the amount of living matter present at any given time, expressed as the mass per unit area or volume of habitat.

Ash mass is the mass or amount of residue present after the residue from the dry mass determination has been ashed in a muffle furnace at a temperature of 500°C for 1 hour. The ash mass values of zooplankton and phytoplankton are expressed in grams per cubic meter (g/m^3), and periphyton and benthic organisms in grams per square meter (g/m^2).

Dry mass refers to the mass of residue present after drying in an oven at 60°C for zooplankton and 105°C for periphyton, until the mass remains unchanged. This mass represents the total organic matter, ash and sediment, in the sample. Dry mass values are expressed in the same units as ash mass.

Organic mass or volatile mass of the living substance is the difference between the dry mass and ash mass, and represents the actual mass of the living matter. The organic mass is expressed in the same units as for ash mass and dry mass.

Wet mass is the mass of living matter plus contained water.

Biomass pigment ratio is an indicator of the total proportion of periphyton which are autotrophic (plants). This is also called the Autotrophic Index.

Bottom material is the unconsolidated material of which a streambed, lake, pond, reservoir, or estuary bottom is composed.

Recoverable from bottom material is the amount of a given constituent that is in solution after a representative sample of bottom material has been digested by a method (usually using an acid or mixture of acids) that results in dissolution of only readily soluble substances. Complete dissolution of all bottom material is not achieved by the digestion treatment and thus the determination represents less than the total amount (that is, less than 95 percent) of the constituent in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Total in bottom material is the total amount of a given constituent in a representative sample of bottom material. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total in bottom material".

Cells/volume refers to the number of cells of any organism which is counted by using a microscope and grid or counting cell. Many planktonic organisms are multicelled and are counted according to the number of contained cells per sample, usually milliliters (mL) or liters (L).

Cfs-day is the volume of water represented by flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, approximately 1.9835 acre-feet, about 646,000 gallons or 2,447 cubic meters.

Chemical oxygen demand (COD) is a measure of the chemically oxidizable material in the water, and furnishes an approximation of the amount of organic and reducing material present. The determined value may correlate with natural water color or with carbonaceous organic pollution from sewage or industrial wastes.

Chlorophyll refers to the green pigments of plants. Chlorophyll a and b are the two most common pigments in plants.

Colloid is any substance with particles in such a fine state of subdivision dispersed in a medium, for example water, that they do not settle out; but not in so fine a state of subdivision that they can be said to be truly dissolved.

Color unit is produced by one milligram per liter of platinum in the form of the chloroplatinate ion. Color is expressed in units of the platinum-cobalt scale.

Contents is the volume of water in a reservoir or lake. Unless otherwise indicated, volume is computed on the basis of a level pool and does not include bank storage.

Control designates a feature downstream from the gage that determines the stage-discharge relation at the gage. This feature may be a natural constriction of the channel, an artificial structure, or a uniform cross section over a long reach of the channel.

Control structure as used in this report is a structure on a stream or canal that is used to regulate the flow or stage of the stream or to prevent the intrusion of salt water.

Cubic feet per second per square mile (CFSM) is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming that the runoff is distributed uniformly in time and area.

Cubic foot per second (FT^3/S, ft^3/s) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to approximately 7.48 gallons per second or 448.8 gallons per minute or 0.02832 cubic meters per second.

Discharge is the volume of water (or more broadly, volume of fluid plus suspended sediment), that passes a given point within a given period of time.

Mean discharge (MEAN) is the arithmetic mean of individual daily mean discharges during a specific period.

Instantaneous discharge is the discharge at a particular instant of time.

Dissolved refers to that material in a representative water sample which passes through a 0.45-micrometer membrane filter. This is a convenient operational definition used by Federal agencies that collect water data. Determinations of "dissolved" constituents are made on subsamples of the filtrate. It is recognized that certain kinds of samples cannot be filtered; to provide for this, procedures that are considered equivalent to filtering through a 0.45-micrometer membrane filter will be identified and announced at a later date.

Diversity index is a numerical expression of evenness of distribution of aquatic organisms. The formula for diversity index is:

$$\bar{d} = -\sum_{i=1}^{s} \frac{n_i}{n} \log_2 \frac{n_i}{n}$$

Where n_i is the number of individuals per taxon, n is the total number of individuals, and s is the total number of taxa in the sample of the community. Diversity index values range from zero, when all the organisms in the sample are the same, to some positive number, when some or all of the organisms in the sample are different.

Drainage area of a stream at a specific location is that area, measured in a horizontal plane, enclosed by a topographic divide from which direct surface runoff from precipitation normally drains by gravity into the river above the specified point. Figures of drainage area given herein include all closed basins, or noncontribution areas, within the area unless otherwise noted.

Drainage basin is a part of the surface of the earth that is occupied by a drainage system, which consists of a surface stream or a body of impounded surface water together with all tributary surface streams and bodies of impounded surface water.

Gage height (G.H.) is the water-surface elevation referred to some arbitrary gage datum. Gage height is often used interchangeably with the more general term "stage," although gage height is more appropriate when used with a reading on a gage.

Gaging station is a particular site on a stream, canal, lake, or reservoir where systematic observations of hydrologic data are obtained.

Hardness of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is attributable to the presence of alkaline earths (principally calcium and magnesium) and is expressed as equivalent calcium carbonate ($CaCO_3$).

Hydrologic unit is a geographic area representing part or all of a surface drainage basin or distinct hydrologic feature as delineated by the Office of Water Data Coordination on the State Hydrologic Unit Maps; each hydrologic unit is identified by an 8-digit number.

Methylene blue active substance (MBAS) is a measure of apparent detergents. This determination depends on the formation of a blue color when methylene blue dye reacts with synthetic detergent compounds.

Micrograms per gram (µg/g) is a unit expressing the concentration of a chemical element as the mass (micrograms) of the element sorbed per unit mass (gram) of sediment.

Micrograms per liter (UG/L, µg/L) is a unit expressing the concentration of chemical constituents in solution as mass (micrograms) of solute per unit volume (liter) of water. One thousand micrograms per liter is equivalent to one milligram per liter.

Milligrams per liter (MG/L, mg/L) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per liter represent the mass of solute per unit volume (liter) of water. Concentration of suspended sediment also is expressed in mg/L, and is based on the mass of sediment per liter of water-sediment mixture.

National Geodetic Vertical Datum of 1929 (NGVD) is a geodetic datum derived from a general adjustment of the first order level nets of both the United States and Canada. It was formerly called "Sea Level Datum of 1929" or "mean sea level" in this series of reports. Although the datum was derived from the average sea level over a period of many years at 26 tide stations along the Atlantic, Gulf of Mexico, and Pacific Coasts, it does not necessarily represent local mean sea level at any particular place.

Organism is any living entity, such as an insect, phytoplankter, or zooplankter.

Organism count/area refers to the number of organisms collected and enumerated in a sample and adjusted to the number per area habitat, usually square meters (m^2), acres, or hectares. Periphyton benthic organisms, and macrophytes are expressed in these terms.

Organism count/volume refers to the number of organisms collected and enumerated in a sample and adjusted to the number per sample volume, usually milliliters (mL) or liters (L). Numbers of planktonic organisms can be expressed in these terms.

Total organism count is the total number of organisms collected and enumerated in any particular sample.

Partial-record station is a particular site where limited streamflow and/or water-quality data are collected systematically over a period of years for use in hydrologic analyses.

Particle-size is the diameter, in millimeters (mm), of suspended sediment or bed material determined by either sieve or sedimentation methods. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube) determine fall diameter of particles in either distilled water (chemically dispersed) or in native water (the river water at the time and point of sampling).

Particle-size classification used in this report agrees with recommendations made by the American Geophysical Union Subcommittee on Sediment Terminology.

The classification is as follows:

Classification	Size (mm)	Method of analysis
Clay..........	0.00024 - 0.004	Sedimentation.
Silt..........	.004 - .062	Sedimentation.
Sand..........	.062 - 2.0	Sedimentation or sieve.
Gravel........	2.0 - 64.0	Sieve.

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. Most of the organic material is removed and the sample is subjected to mechanical and chemical dispersion before analysis in distilled water. Chemical dispersion is not used for native water analysis.

Percent composition is a unit for expressing the ratio of a particular part of a sample or population to the total sample or population, in terms of types, numbers, mass or volume.

Periphyton is the assemblage of algae, fungi, and bacteria which are attached to or live upon submerged objects in lakes and rivers.

Pesticides are chemical compounds used to control undesirable plants and animals. Major categories of pesticides include insecticides, miticides, fungicides, herbicides, and rodenticides. Insecticides and herbicides, which control insects and plants respectively, are the two categories reported.

Picocurie (PC, pCi) is one trillionth (1×10^{12}) of the amount of radioactivity represented by a curie (Ci). A curie is the amount of radioactivity that yields 3.7×10^{10} radioactive disintegrations per second. A picocurie yields 2.22 dpm (disintegrations per minute).

Plankton is the community of suspended, floating, or weakly swimming organisms that live in the open water of lakes and rivers.

Phytoplankton is the plant part of the plankton. They are usually microscopic and their movement is subject to the water currents. Phytoplankton growth is dependent upon solar radiation and nutrient substances. Because they are able to incorporate as well as release materials to the surrounding water, the phytoplankton have a profound effect upon the quality of the water. They are the primary food producers in the aquatic environment, and are commonly known as algae.

Blue-green algae are a group of phytoplankton organisms having a blue pigment, in addition to the green pigment called chlorophyll. Blue-green algae often cause nuisance conditions in water.

Diatoms are the unicellular or colonial algae having a siliceous shell. Their concentrations are expressed as number of cells/mL of sample.

Euglenoids (Euglenophyta) are a group of algae that are usually free-swimming and rarely creeping. They have the ability to grow either photosynthetically in the light or heterotrophically in the dark.

Fire algae (Pyrrhophyta) are free-swimming unicells characterized by a red spot.

Green algae have chlorophyll pigments similar in color to those of higher green plants. Some forms produce algal mats or floating "moss" in lakes. Their concentrations are expressed as number of cells/mL of sample.

Zooplankton is the animal part of the plankton. Zooplankton are capable of extensive movements within the water column, and are often large enough to be seen with the unaided eye. Zooplankton are secondary consumers feeding upon bacteria, phytoplankton, and detritus. Because they are the grazers in the aquatic environment, the zooplankton are a vital part of the aquatic food web. The zooplankton community is dominated by small crustaceans and rotifers.

Polychlorinated biphenyls (PCBs) are industrial chemicals that are mixtures of chlorinated biphenyl compounds having various percentages of chlorine. They are similar in structure to organochlorine insecticides.

Polychlorinated napthalenes (PCNs) are industrial chemicals that are mixtures of chlorinated napthalene compounds. They have properties and applications similar to polychlorinated biphenyls (PCBs) and have been identified in commercial PCB preparations.

Primary productivity is a measure of the rate at which new organic matter is formed and accumulated through photosynthetic and chemosynthetic activity of producer organisms (chiefly green plants). The rate of primary production is estimated by measuring the amount of oxygen released (oxygen method) or the amount of carbon assimilated by the plants (carbon method).

Milligrams of carbon per area or volume per unit time [mg C/(m^2·time) for periphyton and macrophytes and mg C/(m^3·time)] for phytoplankton are units for expressing primary productivity. They define the amount of carbon dioxide consumed as measured by radioactive carbon (carbon 14). The carbon 14 method is of greater sensitivity than the oxygen light and dark bottle method, and is preferred for use in unenriched waters. Unit time may be either the hour or day, depending on the incubation period.

Milligrams of oxygen per area or volume per unit time [mg O_2/(m^2·time) for periphyton and macrophytes and mg O_2/(m^3·time)] for phytoplankton are the units for expressing primary productivity. They define production and respiration rates as estimated from changes in the measured dissolved oxygen concentration. The oxygen light and dark bottle method is preferred if the rate of primary production is sufficient for accurate measurements to be made within 24 hours. Unit time may be either the hour or day, depending on the incubation period.

Runoff in inches (IN., in.) shows the depth to which the drainage area would be covered if all the runoff for a given time period were uniformly distributed on it.

Sediment is solid material that originates mostly from disintegrated rocks and is transported by, suspended in, or deposited from water; it includes chemical and biochemical precipitates and decomposed organic material, such as humus. The quantity, characteristics, and cause of the occurrence of sediment in streams are influenced by environmental factors. Some major factors are degree of slope, length of slope, soil characteristics, land usage, and quantity and intensity of precipitation.

Suspended sediment is the sediment that at any given time is maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid.

Suspended-sediment concentration is the velocity-weighted concentration of suspended sediment in the sampled zone (from the water surface to a point approximately 0.3 ft above the bed) expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/L).

Suspended-sediment discharge (tons/day) is the rate at which dry weight of sediment passes a section of a stream or is the quantity of sediment, as measured by dry weight or volume, that passes a section in a given time. It is computed by multiplying discharge times mg/L times 0.0027.

Total sediment discharge (tons/day) is the sum of the suspended-sediment discharge and the bed-load discharge. It is the total quantity of sediment, as measured by dry weight or volume, that passes a section during a given time.

Mean concentration is the time-weighted concentration of suspended sediment passing a stream section during a 24-hour day.

Solute is any substance derived from the atmosphere, vegetation, soil, or rocks that is dissolved in water.

Specific conductance is a measure of the ability of a water to conduct an electrical current. It is expressed in micromhos per centimeter at 25°C. Specific conductance is related to the type and concentration of ions in solution and can be used for approximating the dissolved-solids content of the water. Commonly, the concentration of dissolved solids (in milligrams per liter) is about 65 percent of the specific conductance (in micromhos). This relation is not constant from stream to stream, and it may vary in the same source with changes in the composition of the water.

Stage-discharge relation is the relation between gage height (stage) and volume of water per unit of time, flowing in a channel.

Streamflow is the discharge that occurs in a natural channel. Although the term "discharge" can be applied to the flow of a canal, the work "streamflow" uniquely describes the discharge in a surface stream course. The term "streamflow" is more general than "runoff" as streamflow may be applied to discharge whether or not it is affected by diversion or regulation.

Substrate is the physical surface upon which an organism lived.

Natural substrates refers to any naturally occurring emersed or submersed solid surface, such as a rock or tree, upon which an organism lived.

Artificial substrate is a device which is purposely placed in a stream or lake for colonization of organisms. The artificial substrate simplifies the community structure by standardizing the substrate from which each sample is taken. Examples of artificial substrates are basket samplers (made of wire cages filled with clean streamside rocks) and multi-plate samplers (made of hardboard) for benthic organism collection, and plexiglass strips for periphyton collection.

Surface area of a lake is that area outlined on the latest U.S.G.S. topographic map as the boundary of the lake and measured by a planimeter in acres. In localities not covered by topographic maps, the areas are computed from the best maps available at the time planimetered. All areas shown are those for the stage when the planimetered map was made.

Surficial bed material is that part (0.1 to 0.2 ft) of the bed material that is sampled using U.S. Series Bed-Material Samplers.

Suspended (as used in tables of chemical analyses) refers to the amount (concentration) of the total concentration in a water-sediment mixture. The water-sediment mixture is associated with (or sorbed on) that material retained on a 0.45-micrometer filter.

Suspended, recoverable is the amount of a given constituent that is in solution after the part of a representative water-suspended sediment sample that is retained on a 0.45-micrometer membrane filter has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all the particulate matter is not achieved by the digestion treatment and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Determinations of "suspended, recoverable" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total recoverable concentrations of the constituent.

Suspended, total is the total amount of a given constituent in the part of a representative water-suspended sediment sample that is retained on a 0.45-micrometer membrane filter. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to determine when the results should be reported as " uspended, total".

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Determinations of "suspended, total" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total concentrations of the constituent.

Taxonomy is the division of biology concerned with the classification and naming of organisms. The classification of organisms is based upon a hierarchical scheme beginning with Kingdom and ending with Species at the base. The higher the classification level, the fewer features the organisms have in common. For example, the taxonomy of a particular mayfly, *Hexagenia limbata* is the following:

Kingdom................Animal
Phylum.............Arthropoda
Class.................Insecta
Order...........Ephemeroptera
Family............Ephemeridae
Genus...............*Hexageria*
Species......*Hexagenia limbata*

Time-weighted average is computed by multiplying the number of days in the sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the total number of days. A time-weighted average represents the composition of water that would be contained in a vessel or reservoir that had received equal quantities of water from the stream each day for the year.

Tons per acre-foot indicates the dry mass of dissolved solids in 1 acre-foot of water. It is computed by multiplying the concentration in milligrams per liter by 0.00136.

Tons per day is the quantity of substance in solution or suspension that passes a stream section during a 24-hour day.

Total load (tons) is the total quantity of any individual constituent, as measured by dry mass or volume, that is dissolved in a specific amount of water (discharge) during a given time. It is computed by multiplying the total discharge, times the mg/L of the constituent, times the factor 0.0027, times the number of days.

Total (as used in tables of chemical analyses):

> *Total, recoverable* is the amount of a given constituent that is in solution after a representative water-suspended sediment sample has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all particulate matter is not achieved by the digestion treatment, and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the dissolved and suspended phases of the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.
>
> *Total* is the total amount of a given constituent in a representative water-suspended sediment sample, regardless of the constituent's physical or chemical form. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent present in both the dissolved and suspended phases of the sample. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total". (Note that the word "total" does double duty here, indicating both that the sample consists of a water-suspended sediment mixture and that the analytical method determines all of the constituent in the sample.)

Total organic carbon (TOC) is a measure of all organic matter present in aqueous solution and suspension.

Weighted average is used in this report to indicate discharge-weighted average. It is computed by multiplying the discharge for a sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the sum of the discharges. A discharge-weighted average approximates the composition of water that would be found in a reservoir containing all the water passing a given location during the water year after thorough mixing in the reservoir.

WRD is used as an abbreviation for "Water Resources Data" in the REVISED RECORDS paragraph to refer to State annual basic-data reports published before 1975.

WSP is used as an abbreviation for "Water-Supply Paper" in references to previously published reports.

DOWNSTREAM ORDER AND STATION NUMBERS

Since October 1, 1950, the order of listing hydrologic-station records in Survey reports is in a downstream direction along the main stream. All stations on a tributary entering upstream from a main-stream station are listed before that station. A station on a tributary that enters between two main-stream stations is listed between them. A similar order is followed in listing stations on first rank, second rank, and other ranks of tributaries. The rank of any tributary on which a station is situated with respect to the stream to which it is immediately tributary is indicated by an indention in a list of stations in the front of the report. Each indention represents one rank. This downstream order and system of indention show which stations are on tributaries between any two stations and the rank of the tributary on which each station is situated.

As an added means of identification, each hydrologic station, partial-record station, and miscellaneous site has been assigned a station number. These are in the same downstream order used in this report. In assigning station numbers, no distinction is made between partial-record stations, miscellaneous sites, and other stations; therefore, the station number for a partial-record station or a miscellaneous site indicates downstream-order position in a list made up of all types of stations. Gaps are left in the series of numbers to allow for new stations that may be established; hence, the numbers are not consecutive. The complete 8-digit number for each station such as 01300500 includes the 2-digit part number "01" plus the 6-digit downstream order number "300500". In a few instances where no gaps were left in the 8-digit numbering sequence, one or two digits were added (making a 9- or 10-digit station number) and (or) a latitude-longitude number was used for identification.

NUMBERING SYSTEM FOR WELLS

The 8-digit downstream order station numbers are not assigned to wells. The well-numbering system of the U.S. Geological Survey is based on the grid system of latitude and longitude. The system provides the geographic location of the well and a unique number for each site. The number consists of 15 digits. The first 6 digits denote the degrees, minutes, and seconds of latitude, the next 7 digits denote degrees, minutes, and seconds of longitude, and the last 2 digits (assigned sequentially) identify the wells within a 1-second grid. See figure 1 below.

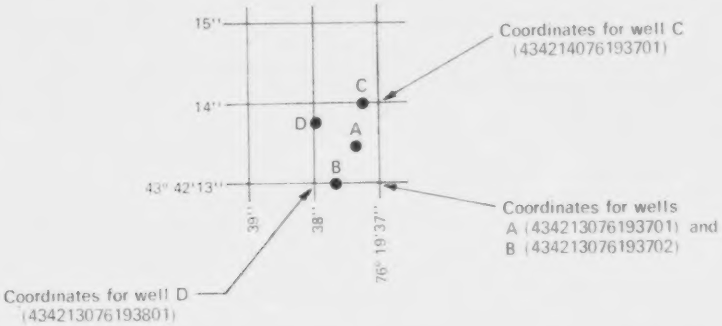
15''
Coordinates for well C (434214076193701)
C
14''
D
A
B
43° 42'13''
Coordinates for wells A (434213076193701) and B (434213076193702)
39''
38''
76° 19'37''
Coordinates for well D (434213076193801)

Figure 1. System for numbering wells (latitude and longitude)

SPECIAL NETWORKS AND PROGRAMS

Hydrologic bench-mark station is one that provides hydrologic data for a basin in which the hydrologic regimen will likely be governed solely by natural conditions. Data collected at a bench-mark station may be used to separate effects of natural from manmade changes in other basins which have been developed and in which the physiography, climate, and geology are similar to those in the undeveloped bench-mark basin.

National stream-quality accounting network (NASQAN) is a data collection network designed by the U.S. Geological Survey to meet many of the information demands of agencies or groups involved in national or regional water-quality planning and management. Both accounting and broad-scale monitoring objectives have been incorporated into the network design. Areal configuration of the network is based on river-basin accounting units (identified by 8-digit hydrologic-unit numbers) designated by the Office of Water Data Coordination in consulation with the Water Resources Council. Primary objectives of the network are (1) to depict areal variability of streamflow and water-quality conditions nationwide on a year-by-year basis and (2) to detect and assess long-term changes in streamflow and stream quality.

Pesticide program is a network of regularly sampled water-quality stations where samples are collected to determine the concentration and distribution of pesticides in streams where potential contamination could result from the application of the commonly used insecticides and herbicides. Operation of the network is a Federal interagency activity.

Radiochemical program is a network of regularly sampled water-quality stations where samples are collected to be analyzed for radioisotopes. The streams that are sampled represent major drainage basins in the conterminous United States.

EXPLANATION OF STAGE AND WATER-DISCHARGE RECORDS

Collection and Computation of Data

The base data collected at gaging stations consist of records of stage and measurements of discharge of streams or canals, and stage, surface area, and contents of lakes or reservoirs. In addition, observations of factors affecting the stage-discharge relation or the stage-capacity relation, weather records, and other information are used to supplement base data in determining the daily flow or volume of water in storage. Records of stage are obtained from either direct readings on a nonrecording gage or from a water-stage recorder that gives either a continuous graph of the fluctuations or a tape punched at selected time intervals. Measurements of discharge are made with a current meter, using the general methods adopted by the Geological Survey. These methods are described in standard textbooks, in Water-Supply Paper 888, and in U.S. Geological Survey Techniques of Water Resources Investigations, book 3, chapter A6.

For stream-gaging stations, rating tables giving the discharge for any stage are prepared from stage-discharge relation curves. If extensions to the rating curves are necessary to express discharge greater than measured, they are made on the basis of indirect measurements of peak discharge (such as slope-area or contracted-opening measurements, computation of flow over dams or weirs), step-backwater techniques, velocity-area studies, and logarithmic plotting. The daily mean discharge is computed from gage heights and rating tables, then the monthly and yearly mean discharges are computed from the daily figures. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is computed by the shifting-control method, in which correction factors based on individual discharge measurements and notes by engineers and observers are used in applying the gage heights to the rating tables. If the stage-discharge relation for a station is temporarily changed by the presence of aquatic growth or debris on the control, the daily mean discharge is computed by what is basically the shifting-control method.

At some stream-gaging stations the stage-discharge relation is affected by the backwater from reservoirs, tributary streams, or other sources. This necessitates the use of the slope method in which the slope or fall in a reach of the stream is a factor in computing discharge. The slope or fall is obtained by means of an auxiliary gage set at some distance from the base gage. At some stations the stage-discharge relation is affected by changing stage; at these stations the rate of change in stage is used as a factor in computing discharge.

At some stream-gaging stations the stage-discharge relation is affected by ice in the winter, and it becomes impossible to compute the discharge in the usual manner. Discharge for periods of ice effect is computed on the basis of gage-height record and occasional winter discharge measurements. Consideration is given to the available information on temperature and precipitation, notes by gage observers and hydrologists, and comparable records of discharge for other stations in the same or nearby basins.

For a lake or reservoir station, capacity tables giving the contents for any stage are prepared from stage-area relation curves defined by surveys. The application of the stage to the capacity table gives the contents, from which the daily, monthly, or yearly change in contents is computed.

If the stage-capacity curve is subject to changes because of deposition of sediment in the reservoir, periodic resurveys of the reservoir are necessary to define new stage-capacity curves. During the period between reservoir surveys the computed contents may be increasingly in error due to the gradual accumulation of sediment.

For some gaging stations there are periods when no gage-height record is obtained or the recorded gage height is so faulty that it cannot be used to compute daily discharge or contents. This happens when the recorder stops or otherwise fails to operate properly, intakes are plugged, the float is frozen in the well, or for various other reasons. For such periods the daily discharges are estimated on the basis of recorded range in stage, prior and subsequent records, discharge measurements, weather records, and comparison with records for other stations in the same or nearby basins. Likewise daily contents may be estimated on the basis of operator's log, prior and subsequent records, inflow-outflow studies, and other information.

The data in this report generally comprise a description of the station and tabulations of daily and monthly figures. For gaging stations on streams or canals a table showing the daily discharge and monthly and yearly discharge is given. For gaging stations on lakes and reservoirs a monthly summary table of stage and contents or a table showing the daily contents is given. Tables of daily mean gage heights are included for some streamflow stations and for some reservoir stations. Records are published for the water year, which begins on October 1 and ends on September 30.

The description of the gaging station gives the location, drainage area, period of record, notations of revisions of previously published records, type and history of gages, general remarks, average discharge, and extremes of discharge or contents. The location of the gaging station and the drainage area are obtained from the most accurate maps available. River mileage, given under "LOCATION" for some stations, is that determined and used by the Corps of Engineers or other agencies. Periods for which there are published records for the present station or for stations generally equivalent to the present one are given under "PERIOD OF RECORD."

Previously published streamflow records of some stations have been found to be in error on the basis of data or information later obtained. Revisions of such records are usually published along with the current records in one of the annual or compilation reports. In order to make it easier to find such revised records, a paragraph headed "REVISED RECORDS" has been added to the description of all stations for which revised records have been published. Listed therein are all the reports in which revisions have been published, each followed by the water years for which figures are revised in that report. In listing the water years only one number is given; for instance, 1965 stands for the water year October 1, 1964, to September 30, 1965. If no daily, monthly, or annual figures of discharge are affected by the revision, the fact is brought out by notations after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "(m)" that only the instantaneous minimum was revised; and "(P)" that only peak discharges were revised. If the drainage area has been revised, the report in which the revised figure was first published is given. It should be noted that for all stations for which cubic feet per second per square mile and runoff in inches are published, a revision of the drainage area necessitates corresponding revision of all figures based on the drainage area. Revised figures of cubic feet per second per square mile and runoff in inches resulting from a revision of the drainage area only are usually not published in the annual series of reports.

The type of gage currently in use; the datum of the present gage referred to National Geodetic Vertical Datum; and a condensed history of the types, locations, and datums of previous gages used during the period of record are given under "GAGE." National Geodetic Vertical Datum is explained in the section, "DEFINITION OF TERMS."

Information pertaining to the accuracy of the discharge records and to conditions which affect the natural flow of the gaging station is given under "REMARKS." For reservoir stations information on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir is given under "REMARKS."

The average discharge for the number of years indicated is given under "AVERAGE DISCHARGE"; it is not given for stations having fewer than 5 complete years of record or for stations where changes in water development during the period of record cause the figure to have little significance. In addition, the median of yearly mean discharges is given for stream-gaging stations having 10 or more complete years of record if the median differs from the average by more than 10 percent. Under "EXTREMES" are given first, the extremes for the period of record, second, information available outside the period of record, and last, those for the current year. Unless otherwise qualified, the maximum discharge (or contents) is the instantaneous maximum corresponding to the crest stage obtained by use of a water-stage recorder (graphic or digital), a crest-stage gage, or a nonrecording gage read at the time of the crest. If the maximum gage height did not occur on the same day as the maximum discharge (or contents), it is given separately. Similarly, the minimum is the instantaneous minimum unless otherwise qualified. For some stations peak discharges are listed with "EXTREMES FOR THE CURRENT YEAR"; if they are, all independent peaks, including the maximum for the year, above the selected base with the time of occurrence and corresponding gage heights are published in tabular format. The base discharge, which is given in the table heading, is selected so that an average of about three peaks a year will be presented. Peak discharges are not published for any canals, ditches, drains, or for any stream for which the peaks are subject to substantial control by man. Time of day is expressed in 24-hour local standard time; for example, 12:30 a.m. is 0030, 1:30 p.m. is 1330. The minimums for these stations are published in a separate paragraph following the table of peaks.

The daily table for stream-gaging stations gives the mean discharge for each day and is followed by monthly and yearly summaries. In the monthly summary below the daily table, the line headed "TOTAL" gives the sum of the daily figures. The line headed "MEAN" gives the average flow in cubic feet per second during the month. The lines headed "MAX" and "MIN" give the maximum and minimum daily discharges, respectively, for the month. Discharge for the month also may be expressed in cubic feet per second per square mile (line headed "CFSM"), or in inches (line headed "IN."). Figures for cubic feet per second per square mile and runoff in inches are omitted if there is extensive regulation or diversion, if the drainage area includes large noncontributing areas, or if the average annual rainfall over the drainage basin is usually less than 20 inches. In the yearly summary below the monthly summary, the figures shown are the appropriate daily discharges for the calendar and water years.

Footnotes to the table of daily discharge are introduced by the word "NOTE." Footnotes are used to indicate periods for which the discharge is computed or estimated by special methods because of no gage-height record, backwater from various sources, or other unusual conditions. Periods of no gage-height record are indicated if the period is continuous for a month or more or includes the maximum discharge for the year. Periods of backwater from an unusual source, of indefinite stage-relation, or of any other unusual condition at the gage site are indicated only if they are a month or more in length and the accuracy of the records is affected. Days on which the stage-discharge relation is affected by ice are not indicated. The methods used in computing discharge for various unusual conditions have been explained in preceding paragraphs.

For most gaging stations on lakes and reservoirs the data presented comprise a description of the station and a monthly summary table of stage and contents. For some reservoirs a table showing daily contents or stage is given. A skeleton table of capacity at given stages is published for all reservoirs for which records are published on a daily basis, but is not published for reservoirs for which only monthly data are given.

Data collected at partial-record stations follow the information for continuous-record sites. Data for partial-record discharge stations are presented in two tables. The first is a table of discharge measurements at low-flow partial-record stations, and the second is a table of annual maximum stage and discharge at crest-stage stations. The tables of partial-record stations are followed by a listing of discharge measurements made at sites other than continuous-record or partial-record stations. Occasionally, a series of discharge measurements are made within a short time period to investigate the seepage gains or losses along a reach of a stream or to determine the low-flow characteristics of an area. Such measurements are also given in special tables following the tables of partial-record stations.

Accuracy of Field Data and Computed Results

The accuracy of streamflow data depends primarily on (1) the stability of the stage-discharge relation or, if the control is unstable, the frequency of discharge measurements, and (2) the accuracy of observations of stage, measurements of discharge, and interpretations of records.

The station description under "REMARKS" states the degree of accuracy of the records. "Excellent" means that about 95 percent of the daily discharges are within 5 percent; "good," within 10 percent; and "fair," within 15 percent. "Poor" means that daily discharges have less than "fair" accuracy.

Figures of daily mean discharge in this report are shown to the nearest hundredth of a cubic foot per second for discharges of less than 1 ft^3/s; to tenths between 1.0 and 10 ft^3/s; to whole numbers between 10 and 1,000 ft^3/s; and to 3 significant figures above 1,000 ft^3/s. The number of significant figures used is based solely on the magnitude of the figure. The same rounding rules apply to discharge figures listed for partial-record stations.

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, consumption, regulation by storage, increase or decrease in evaporation due to artificial causes, or to other factors. For such stations, figures of cubic feet per second per square mile and of runoff in inches are not published unless satisfactory adjustments can be made for diversions, for changes in contents of reservoirs, or for other changes incident to use and control. Evaporation from a reservoir is not included in the adjustments for changes in reservoir contents, unless it is so stated. Even at those stations where adjustments are made, large errors in computed runoff may occur if adjustments or losses are large in comparison with the observed discharge.

Other Data Available

Information of a more detailed nature than that published for most of the gaging stations such as observations of water temperatures, discharge measurements, gage-height records, and rating tables is on file in the district office. Also most gaging-station records are available in computer-usable form and many statistical analyses have been made.

Information on the availability of unpublished data or statistical analyses may be obtained from the district office.

EXPLANATION OF WATER-QUALITY RECORDS

Classification of Records

Water-quality data for surface-water sites are grouped into one of three classifications. A continuing record station is a site where data are collected on a regularly scheduled basis. Frequency may be once or more times daily, weekly, monthly, or quarterly. A partial-record station is a site where limited water-quality data are collected systematically over a period of years. Frequency of sampling is usually less than quarterly. A miscellaneous sampling site is a location other than a continuing or partial-record station, where random samples are collected to give better areal coverage to define water-quality conditions in the river basin.

Arrangement of Records

Water-quality records collected at a surface-water, daily record station are published immediately following that record, regardless of the frequency of sample collection. Station number and name are the same for both records. Where a surface-water daily record station is not available or where the water quality differs significantly from that at the nearby surface-water station, the continuing water-quality record is published with its own station number and name in the regular downstream order sequence. Water-quality data for partial-record stations and for miscellaneous sampling sites appear in separate tables following the table of discharge measurements at miscellaneous sites. Data for precipitation-quality stations appears next. The table of ground-water quality follows ground-water level records. Data for quality of ground water is listed alphabetically by County, and is identified by well number.

Descriptive Headings

For continuing record stations, data is preceded by information pertinent to the history of station operation. These descriptive headings give details regarding location, drainage area, period of record, type of data available, instrumentation, general remarks, cooperation, and extremes for parameters currently measured daily. Headings for precipitation-quality records include location information and a description of the sample collector.

There is a broad range of water-quality parameters available for most stations whose record exceeds more than a few years operation. Sampling schedules are often intermittant for certain types of data, with analyses available for some but not all years within a station's period of record. An accurate description of the variety of data available is shown by grouping similar parameters into a few general categories, which are listed in the "PERIOD OF RECORD" paragraph. Each category of data is followed by a notation of the water year(s) for which data is available and a letter code describing the frequency of sampling (see following section, "Frequency-of-Sampling Notation"). Thus, "CHEMICAL DATA: 1972-74(c), 1977-78(a).", shows there are at least six analyses each year for the first three years of record, no data for this category in 1975 and 1976, and 1 or 2 samples for each of the two most recent years.

Categories of Water-Quality Data

The "PERIOD OF RECORD" paragraph lists the following categories of data to describe information available.

CHEMICAL DATA: Usually includes most of the "major ions", and may often include some of the following physical properties: specific conductance, pH, temperature, color, turbidity, dissolved oxygen.

MINOR ELEMENT DATA: Comprises the "heavy metals" and some of the "alkaline earth" groups. Determinations usually include Fe and Mn, and some but not all of the following: Al, As, Ba, Cd, Cr, Co, Cu, Hg, Li, Ni, Pb, Se, Sn, Sr, Zn.

RADIOLOGICAL DATA: The determinations of the concentration of individual radioactive elements, such as radium 226, cobalt 60, strontium 90, and tritium. This category also includes the gross measurement of radioactivity (alpha, beta, gamma) without regard to the radio-chemical species that produce the radioactivity.

PESTICIDE DATA: The organic compounds (insecticides and herbicides) used to control insects and plants. Routinely, the analyses searches for traces of between 12 to 22 compounds.

ORGANIC DATA: Specific organic compounds (other than pesticides) such as, TOC, PCB, PCN.

NUTRIENT DATA: Constituents containing nitrogen or phosphorus. Results usually include several of the following: nitrite plus nitrate, phosphorus, ammonia nitrogen, organic nitrogen, ammonia nitrogen plus organic nitrogen (Kjeldahl nitrogen).

BIOLOGICAL DATA: The identification and concentration of microscopic plant organisms (phytoplankton, periphyton), or enteric bacteria (total coliform, fecal coliform, or fecal streptococcal) living in aquatic habitats.

SEDIMENT DATA: The less than daily measurement of suspended-sediment concentration and a calculated suspended-sediment discharge, often including a sieve analysis for particle size, percent finer than .062 mm.

Frequency-of-Sampling Notation

The categories of data given in the "PERIOD OF RECORD" paragraph are followed by the water year(s) for which that kind of data was collected. The amount of data available is specified by the following letter codes:

(a) 1 or 2 samples per year.
(b) 3 to 5 samples per year.
(c) 6 to 9 samples per year.
(d) 10 to 20 samples per year.
(e) 21 to 35 samples per year.

Water Analysis

Most methods for collecting and analyzing water samples are described in the U.S. Geological Survey Techniques of Water-Resources Investigations listed on a following page.

One sample can define adequately the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge, depending on the source of material and the turbulence and mixing of the stream. Some streams must be sampled through several vertical sections to obtain a representative sample needed for an accurate mean concentration and for use in calculating load.

Chemical-quality data published in this report are considered to be the most representative values available for the stations listed. The values reported represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. In the rare case where an apparent inconsistency exists between a reported pH value and the relative abundance of carbon dioxide species (carbonate and bicarbonate), the inconsistency is the result of a slight uptake of carbon dioxide from the air by the sample between measurement of pH in the field and determination of carbonate and bicarbonate in the laboratory.

Terminology used in reporting chemical constituents is an indication of whether all or only part of a constituent associated with the solids in a water-quality sample is determined by a chemical analysis. (See preceding section, "Definition of Terms.") The "recoverable" in the terms "Suspended, recoverable", "Total, recoverable", and "Recoverable from bottom material" indicates that the constituent was digested by a method that results in the dissolution of only readily soluble substances. Thus, the determination may not represent all of the constituent actually present in the sample. The "total" in the terms "Total", "Suspended, total", and "Total in bottom material" is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined.

For chemical-quality stations equipped with digital monitors, the records consist of daily maximum, minimum, and mean values for each constituent measured and are based upon hourly punches beginning at 0100 hours and ending at 2400 hours for the day of record. More detailed records (hourly values) may be obtained from the district office.

Water Temperatures

Water temperatures are measured at most of the water-quality stations. In addition, water temperatures are taken at time of discharge measurements for water-discharge stations. For stations where water temperatures are taken manually once or twice daily, the water temperatures are taken at about the same time each day. Large streams have a small diurnal temperature change; shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharges.

At stations where recording instruments are used, either mean temperatures and/or maximum and minimum temperatures for each day are published.

Sediment

Suspended-sediment concentrations are determined from samples collected by using depth-integrating samplers. Samples usually are obtained at several verticals in the cross section, or a single sample may be obtained at a fixed point and a coefficient applied to determine the mean concentration in the cross sections.

During periods of rapidly changing flow or rapidly changing concentration, samples may have been collected more frequently (twice daily or, in some instances, hourly). The published sediment discharges for days of rapidly changing flow or concentration were computed by the subdivided day method (time-discharge weighted average). Therefore, for those days when the published sediment discharge value differs from the value computed as the product of discharge times mean concentration times 0.0027, the reader can assume that the sediment discharge for that day was computed by the subdivided day method. For periods when no samples were collected, daily loads of suspended sediment were estimated on the basis of water discharge, sediment concentrations observed immediately before and after the periods, and suspended-sediment loads for other periods of similar discharge.

At other stations, suspended-sediment samples were collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of observations, such data are useful in establishing seasonal relations between quality and streamflow in predicting long-term sediment-discharge characteristics of the stream.

In addition to the records of the quantities of suspended sediment, records of the periodic measurements of the particle-size distribution of the suspended sediment and bed material are included.

EXPLANATION OF GROUND-WATER LEVEL RECORDS

Collection of Data

Ground-water level data from 44 observation wells are published herein; records for 4 of these wells are published for the first time.

Each well is identified by means of (1) a 15-digit number that is based on latitude and longitude and (2) a local number that is provided for local needs. See figure 1.

Measurements are made in many types of wells, under varying conditions of access and at different temperatures, hence, neither the method of measurement nor the equipment can be standardized. At each observation well, however, the equipment and techniques used are those that will ensure that measurements at each well are consistent.

Water-level measurements in this report are given in feet with reference to land-surface datum (lsd). Land-surface datum is a datum plane that is approximately at land surface at each well; National Geodetic Vertical Datum of 1929 is the datum plane on which the national network of precise levels is based. If known, the altitude of the land-surface datum above National Geodetic Vertical Datum of 1929 is given in the well description. The height of the measuring point (MP) above or below land-surface datum is given in each well description. Water levels in wells equipped with recording gages are reported for every fifth day and the end of each month (eom).

Water levels are reported to as many significant figures as can be justified by the local conditions. For example, in a measurement of a depth to water of several hundred feet, the error in determining the absolute value of the total depth to water may be a few tenths of a foot, whereas the error in determining the net change of water level between successive measurements may be only a hundredth or a few hundredths of a foot. For lesser depths to water the accuracy is greater. Accordingly, most measurements are reported to a hundredth of a foot, but some are given only to a tenth of a foot.

PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS

Thirty-four manuals by the U.S. Geological Survey have been published to date in the series on techniques describing procedures for planning and executing specialized work in water-resources investigations. The material is grouped under major subject headings called books and is further divided into sections and chapters. For example, Section A of Book 3 (Applications of Hydraulics) is on surface water. The chapter, the unit of publication, is limited to a narrow field of subject matter. This format permits flexibility in revision and publication as the need arises. The reports listed below are for sale by the U.S. Geological Survey, Branch of Distribution, 1200 South Eads Street, Arlington, VA 22202 (authorized agent of the Superintendent of Documents, Government Printing Office). Prices are effective October 1978 but are subject to change.

NOTE: When ordering any of these publications, please give the title, book number, chapter number, and "U.S. Geological Survey Techniques of Water-Resources Investigations."

1-D1. *Water temperature-influential factors, field measurement, and data presentation*, by H. H. Stevens Jr., J. F. Ficke, and G. F. Smoot: USGS--TWRI Book 1, Chapter D1. 1975 65 p. $1.60.

1-D2. *Guidelines for collection and field analysis of ground-water samples for selected unstable constituents*, by W. W. Wood: USGS--TWRI Book 1, Chapter D2. 1976. 24 pages. $0.85.

2-D1. *Application of surface geophysics to ground-water investigations*, by A. A. R. Zohdy, G. P. Eaton, and D. R. Mabey: USGS--TWRI Book 2, Chapter D1. 1974. 116 pages. $1.90.

2-E1. *Application of borehole geophysics to water-resources investigations*, by W. S. Keys and L. M. MacCary: USGS--TWRI Book 2, Chapter E1. 1971. 126 pages. $1.75.

3-A1. *General field and office procedures for indirect discharge measurements*, by M. A. Benson and Tate Dalrymple: USGS--TWRI Book 3, Chapter A1. 1967. 30 pages. $1.00.

3-A2. *Measurement of peak discharge by the slope-area method*, by Tate Dalrymple and M. A. Benson: USGS--TWRI Book 3, Chapter A2. 1967. 12 pages. $0.35.

3-A3. *Measurement of peak discharge at culverts by indirect methods*, by G. L. Bodhaine: USGS--TWRI Book 3, Chapter A3. 1968. 60 pages. $0.40.

3-A4. *Measurement of peak discharge at width contractions by indirect methods*, by H. F. Matthai: USGS--TWRI Book 3, Chapter A4. 1967. 44 pages. $1.00.

3-A5. *Measurement of peak discharge at dams by indirect methods*, by Harry Hulsing: USGS--TWRI Book 3, Chapter A5. 1967. 29 pages. $0.35.

3-A6. *General procedure for gaging streams*, by R. W. Carter and Jacob Davidian: USGS--TWRI Book 3, Chapter A6, 1968. 13 pages. $1.00.

3-A7. *Stage measurements at gaging stations*, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A7. 1968. 28 pages. $1.40.

3-A8. *Discharge measurements at gaging stations*, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A8, 1969. 65 pages. $1.25.

3-A11. *Measurement of discharge by moving-boat method*, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 3, Chapter A11. 1969. 22 pages. $1.20.

3-A12. *Fluorometric procedures for dye tracing*, by J. F. Wilson Jr.: USGS--TWRI Book 3, Chapter A12. 1968. 31 pages. $0.35. Not currently available.

3-B1. *Aquifer-test design, observation, and data analysis*, by R. W. Stallman: USGS--TWRI Book 3, Chapter B1. 1971. 26 pages $0.70.

3-B2. *Introduction to ground-water hydraulics, a programed text for self-instruction*, by G. D. Bennett: USGS--TWRI Book 3, Chapter B2 1976. 172 pages. $2.50.

3-C1. *Fluvial sediment concepts*, by H. P. Guy: USGS--TWRI Book 3, Chapter C1. 1970. 55 pages. $2.50.

3-C2. *Field methods for measurement of fluvial sediment*, by H. P. Guy and V. W. Norman: USGS--TWRI Book 3, Chapter C2, 1970. 59 pages $2.50.

3-C3. *Computation of fluvial-sediment discharge*, by George Porterfield: USGS--TWRI Book 3, Chapter C3. 1972. 66 pages. $2.10.

4-A1. *Some statistical tools in hydrology*, by H. C. Riggs: USGS--TWRI Book 4, Chapter A1. 1968. 39 pages. $1.60.

4-A2. *Frequency curves*, by H. C. Riggs: USGS--TWRI Book 4, Chapter A2. 1968. 15 pages. $1.20.

4-B1. *Low-flow investigations*, by H. C. Riggs: USGS--TWRI Book 4, Chapter B1. 1972, 18 pages. $0.65.

4-B2. *Storage analyses for water supply*, by H. C. Riggs and C. H. Hardison: USGS--TWRI Book 4, Chapter B2. 1973. 20 pages. $0.75.

4-B3. *Regional analyses of streamflow characteristics*, by H. C. Riggs: USGS--TWRI Book 4, Chapter B3. 1973. 15 pages. $0.65.

PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS--Continued

4-D1. *Computation of rate and volume of stream depletion by wells*, by C. T. Jenkins: USGS--TWRI Book 4, Chapter D1. 1970. 17 pages. $1.10.

5-A1. *Methods for collection and analysis of water samples for dissolved minerals and gases*, by Eugene Brown, M. W. Skougstad, and M. J. Fishman: USGS--TWRI Book 5, Chapter A1. 1970. 160 pages $2.40.

5-A2. *Determination of minor elements in water by emission spectroscopy*, by P. R. Barnett and E. C. Mallory, Jr.: USGS--TWRI Book 5, Chapter A2. 1971. 31 pages. $0.80.

5-A3. *Methods for analysis of organic substances in water*, by D. F. Goerlitz and Eugene Brown: USGS--TWRI Book 5, Chapter A3. 1972. 40 pages. $0.90.

5-A4. **Methods for collection and analysis of aquatic biological and microbiological samples*, edited by P. E. Greeson, T. A. Ehlke, G. A. Irwin, B. W. Lium, and K. V. Slack: USGS--TWRI Book 5, Chapter A4. 1977. 332 pages. $20.00.

5-A5. **Methods for determination of radioactive substances in water and fluvial sediments*, by L. L. Thatcher, V. J. Janzer, and K. W. Edwards: USGS--TWRI Book 5, Chapter A5. 1977. 95 pages. $16.00.

5-C1. *Laboratory theory and methods for sediment analysis*, by H. P. Guy: USGS--TWRI Book 5, Chapter C1. 1969. 58 pages. $2.10.

7-C1. *Finite-difference model for aquifer simulation in two dimensions with results of numerical experiments*, by P. C. Trescott, G. F. Pinder, and S. P. Larson: USGS--TWRI Book 7, Chapter C1. 1976. 116 pages. $2.30.

8-A1. *Methods of measuring water levels in deep wells*, by M. S. Garber and F. C. Koopman: USGS--TWRI Book 8, Chapter A1. 1968. 23 pages. $0.70.

8-B2. *Calibration and maintenance of vertical-axis type current meters*, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 8, Chapter B2. 1968. 15 pages. $1.10.

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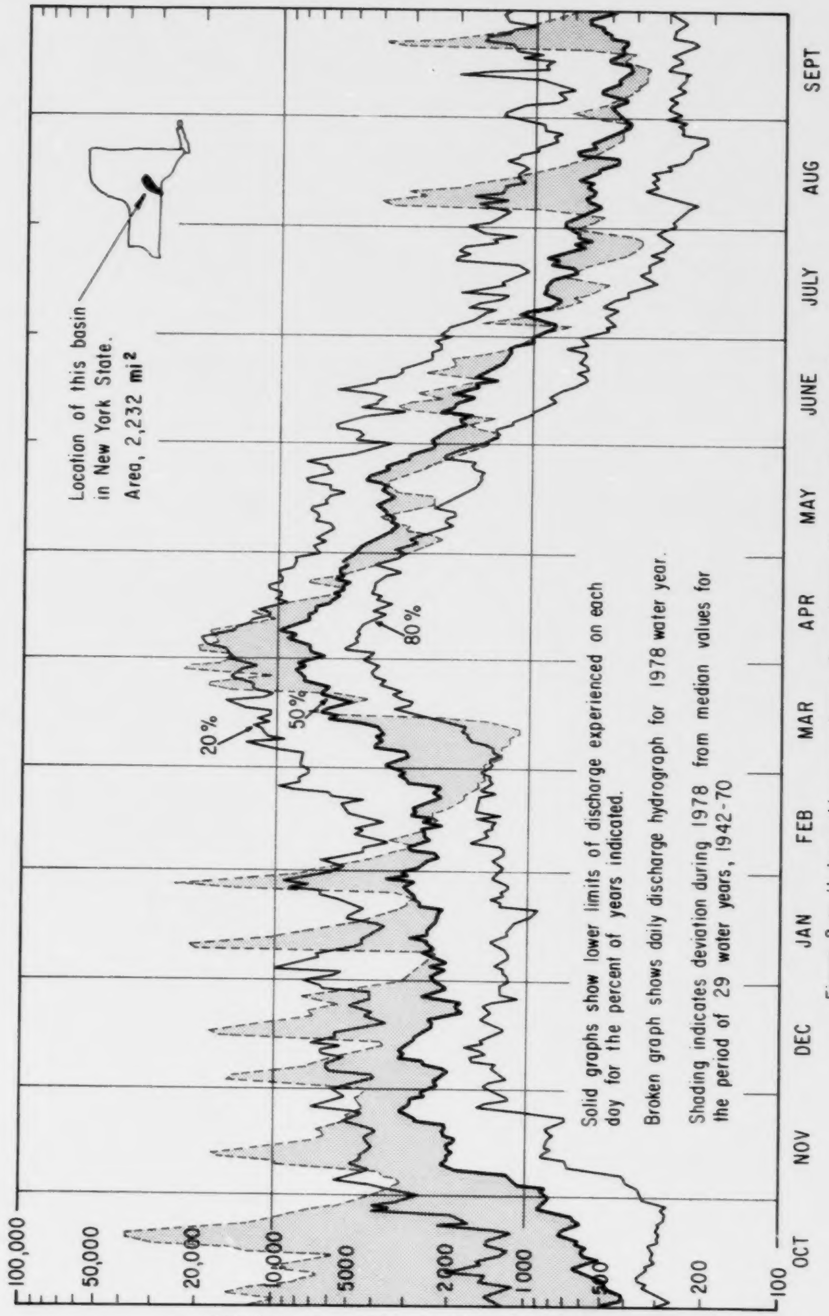
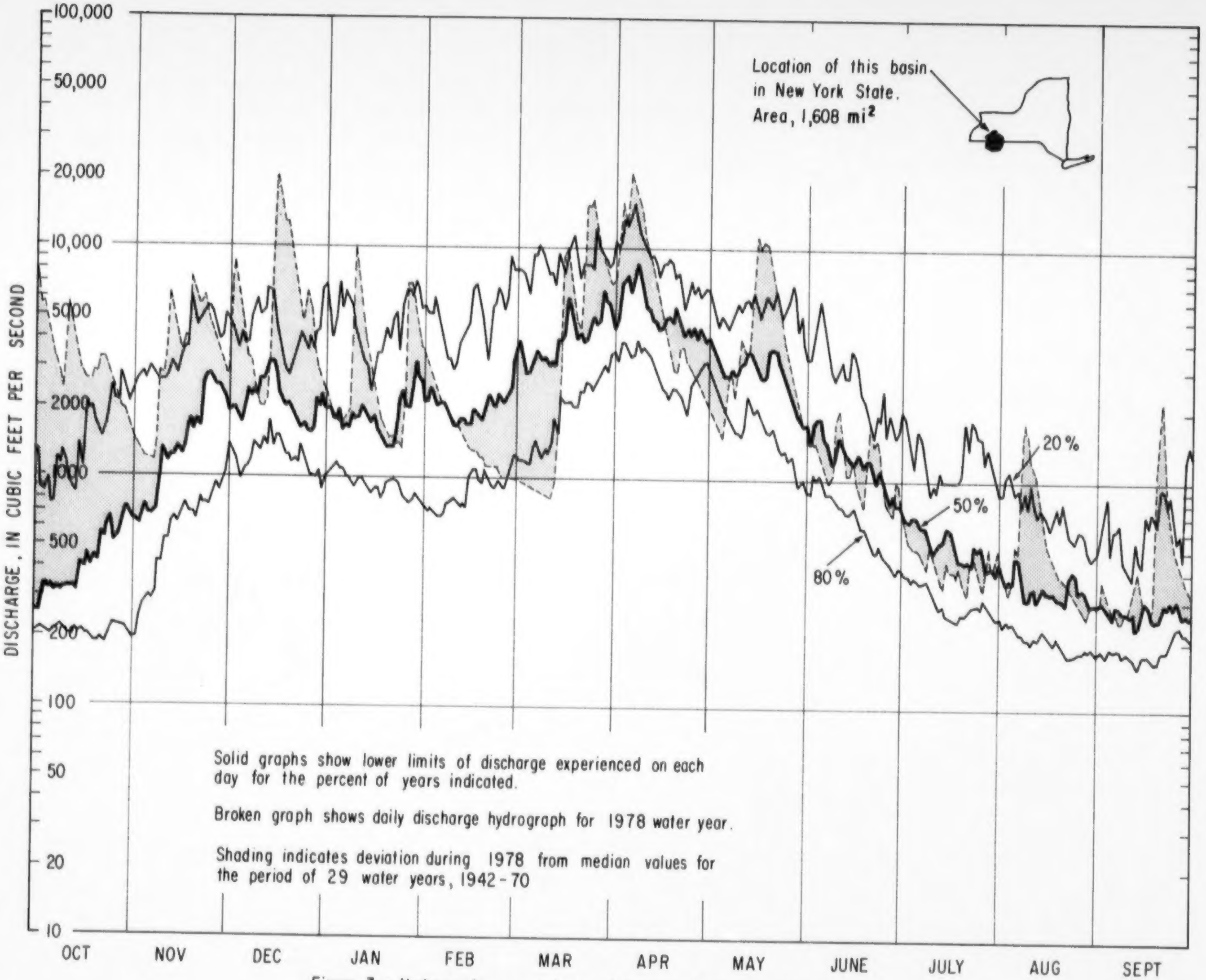


Solid graphs show lower limits of discharge experienced on each day for the percent of years indicated.

Broken graph shows daily discharge hydrograph for 1978 water year.

Shading indicates deviation during 1978 from median values for the period of 29 water years, 1942-70

Figure 2.-- Hydrographic comparisons, Susquehanna River at Conklin, N Y



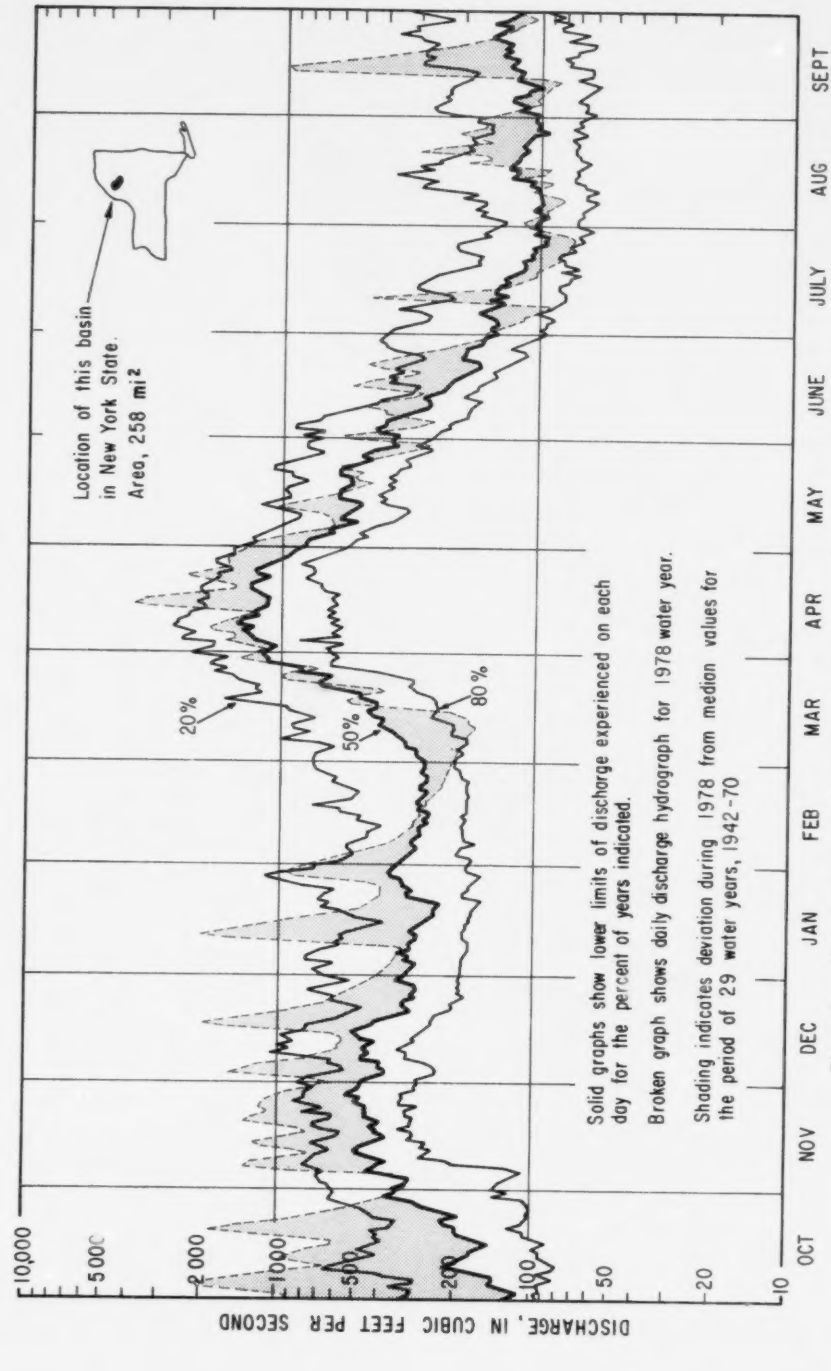
Location of this basin in New York State. Area, 1,608 mi²

Solid graphs show lower limits of discharge experienced on each day for the percent of years indicated.

Broken graph shows daily discharge hydrograph for 1978 water year.

Shading indicates deviation during 1978 from median values for the period of 29 water years, 1942-70

Figure 3.-- Hydrographic comparisons, Allegheny River at Salamanca, N Y

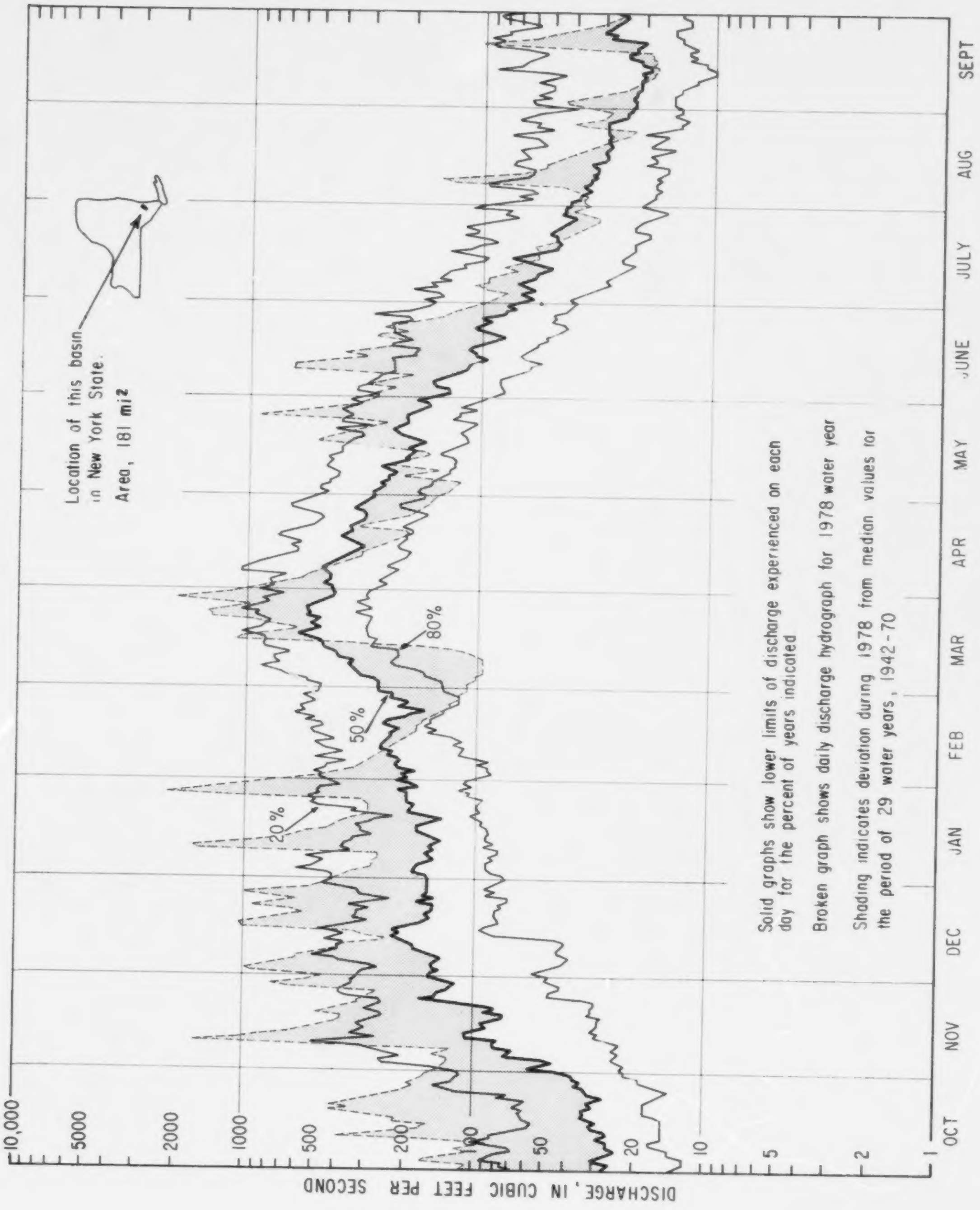


Solid graphs show lower limits of discharge experienced on each day for the percent of years indicated.

Broken graph shows daily discharge hydrograph for 1978 water year.

Shading indicates deviation during 1978 from median values for the period of 29 water years, 1942-70

Figure 4.-- Hydrographic comparisons, West Branch Oswegatchie River near Harrisville, N Y

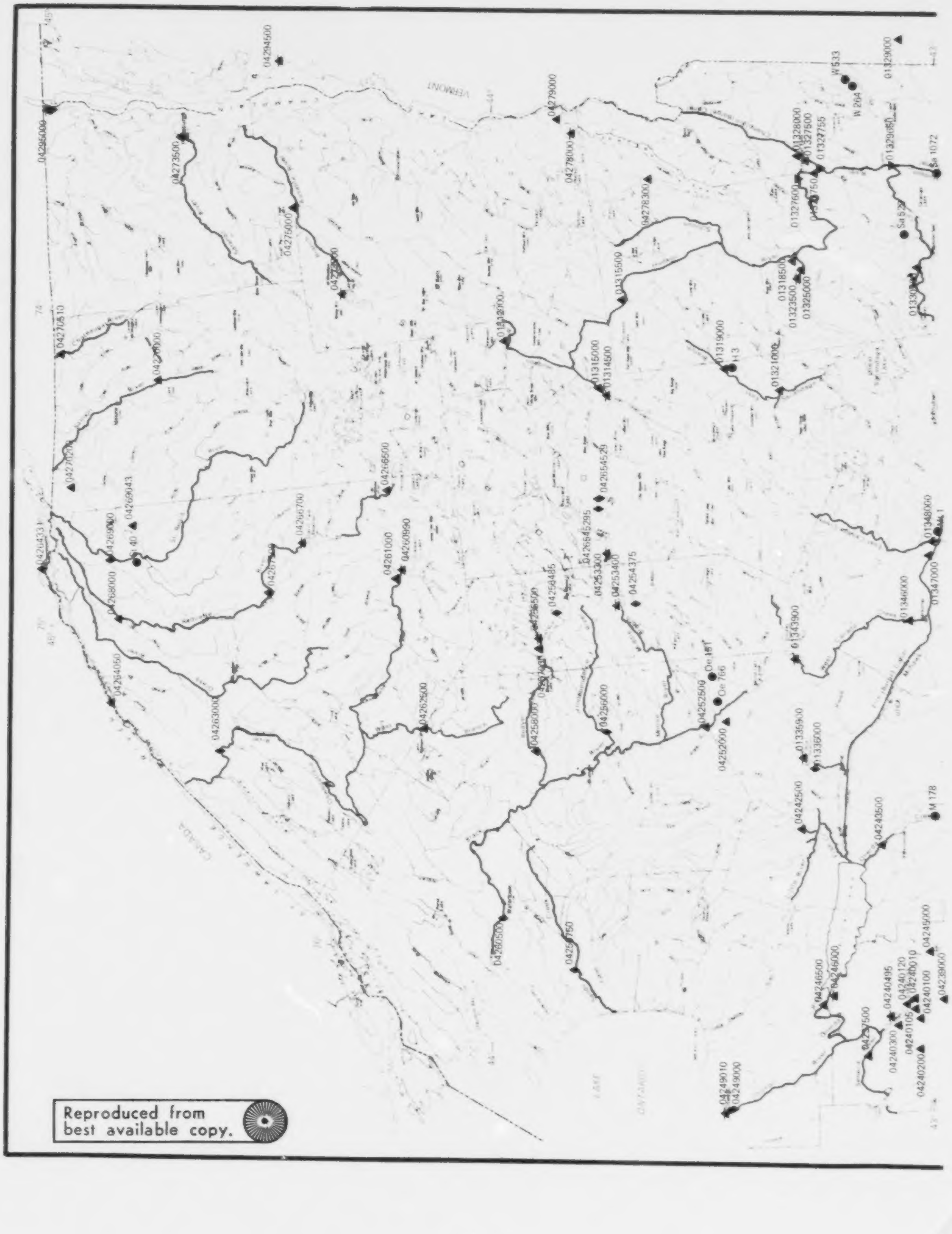


Solid graphs show lower limits of discharge experienced on each day for the percent of years indicated

Broken graph shows daily discharge hydrograph for 1978 water year

Shading indicates deviation during 1978 from median values for the period of 29 water years, 1942-70

Figure 5.-- Hydrographic comparisons, Wappinger Creek near Wappingers Falls, NY


VERMONT
CANADA
LAKE ONTARIO
45
44
43
74
76
04295000
04294500
04273500
04275000
04271500
04270510
04271000
04279000
04278000
04278300
04312000
01315500
01315000
01314500
01319000
H3
01321000
01318500
01323500
01325000
01321600
01328000
01327500
01327755
01329000
W533
W264
01329500
Sa 1072
Sa 522
01330000
04270200
04269043
04266500
04266700
04264331
04269000
04268000
04267500
04261000
04260990
04265295
04265452
04253300
04253400
04254375
04256485
04264050
04263000
04262500
04258000
04256000
04252500
On 761
On 766
04252000
01343900
01346000
01348000
01347000
01335930
01336000
04242500
04243500
M 178
04260500
04257750
04246500
04246000
04245000
04240495
04240120
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04239000
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04240105
04240300
04237500
04240200
04249010
04249000

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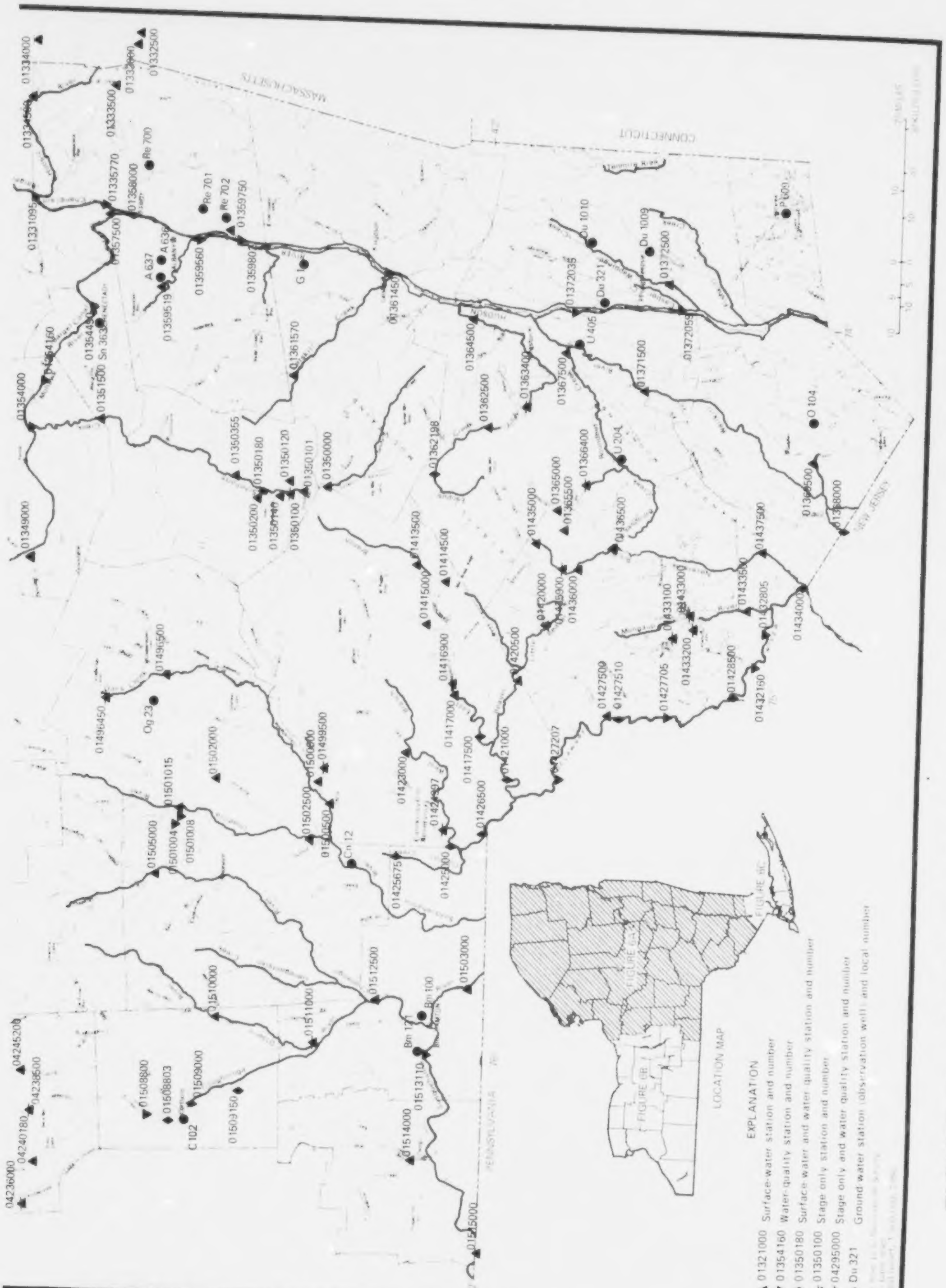
MASSACHUSETTS
CONNECTICUT
PENNSYLVANIA
NEW JERSEY
01334000
01332500
01333000
01333500
01334500
01331095
01335770
01358000
01357500
Re 700
Re 701
Re 702
01359750
A 637
A 636
01359560
01359519
01359802
01354000
01354160
01354450
01351500
Sn 363
01361570
01361450
01364500
01372035
Du 1010
Du 1009
Du 321
01372500
P 509
U 405
01367500
01363400
01362500
01371500
01372058
01349000
01350355
01350180
01350120
01350101
01350000
01350200
01350140
01350100
01362198
O 104
U 204
01366400
01365000
01365500
01435000
01436500
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01413500
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01433100
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01416900
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01427510
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01432160
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01502000
01417000
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01427207
01501015
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01505000
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01423000
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01425675
04245200
04238500
04240180
04236000
01508800
01508803
01509000
01509150
C 102
01510000
01511000
01512500
01503000
Bm 100
Bm 121
01513110
01514000
01515000
LOCATION MAP
FIGURE 6A
FIGURE 6B
FIGURE 6C
EXPLANATION
▲ 01321000 Surface-water station and number
▼ 01354160 Water-quality station and number
◆ 01350180 Surface-water and water quality station and number
▲ 01350100 Stage only station and number
✦ 04295000 Stage only and water quality station and number
● Du 321 Ground water station (observation well) and local number

FIGURE 6A.-- LOCATION OF GAGING STATIONS AND OBSERVATION WELLS

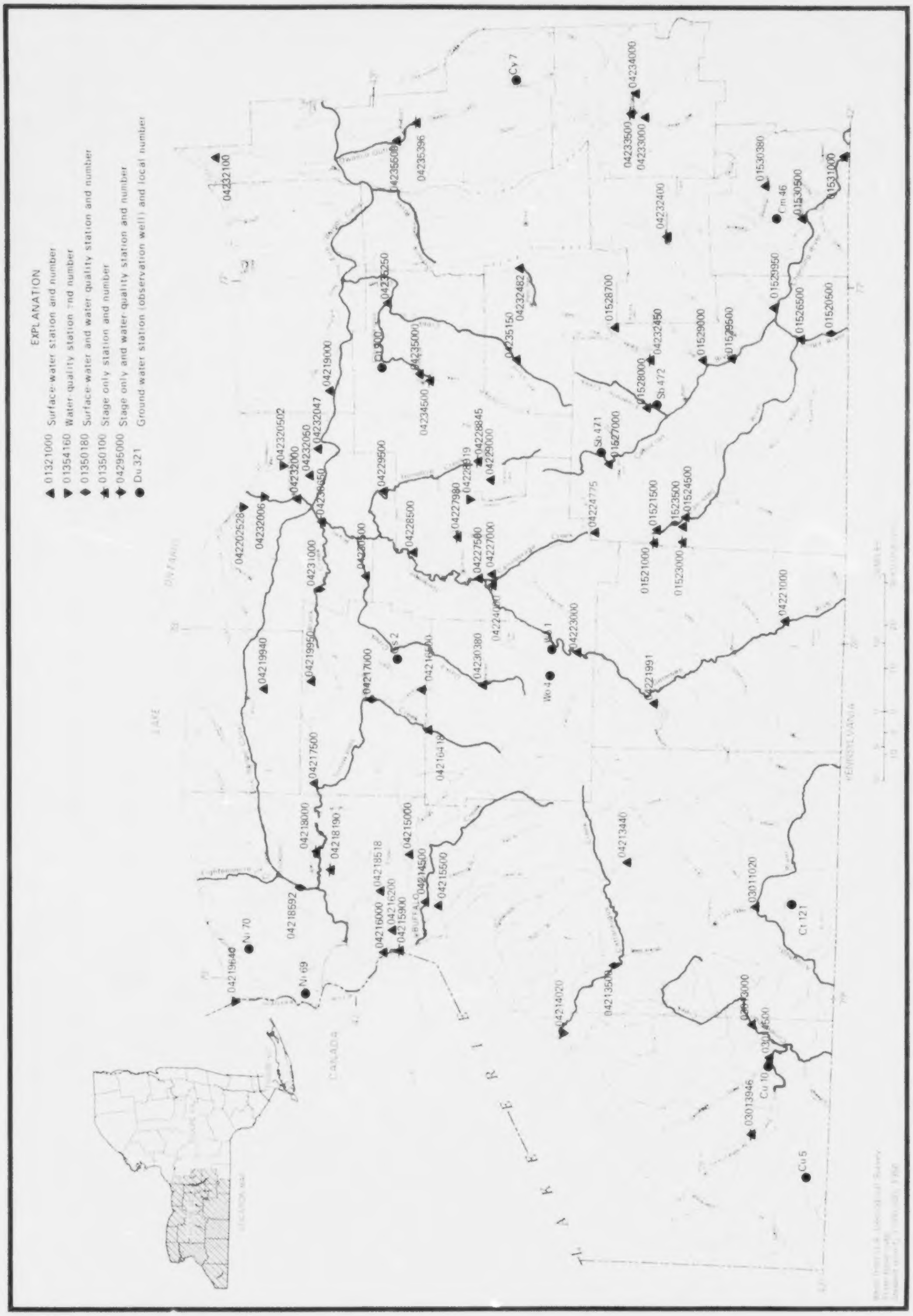
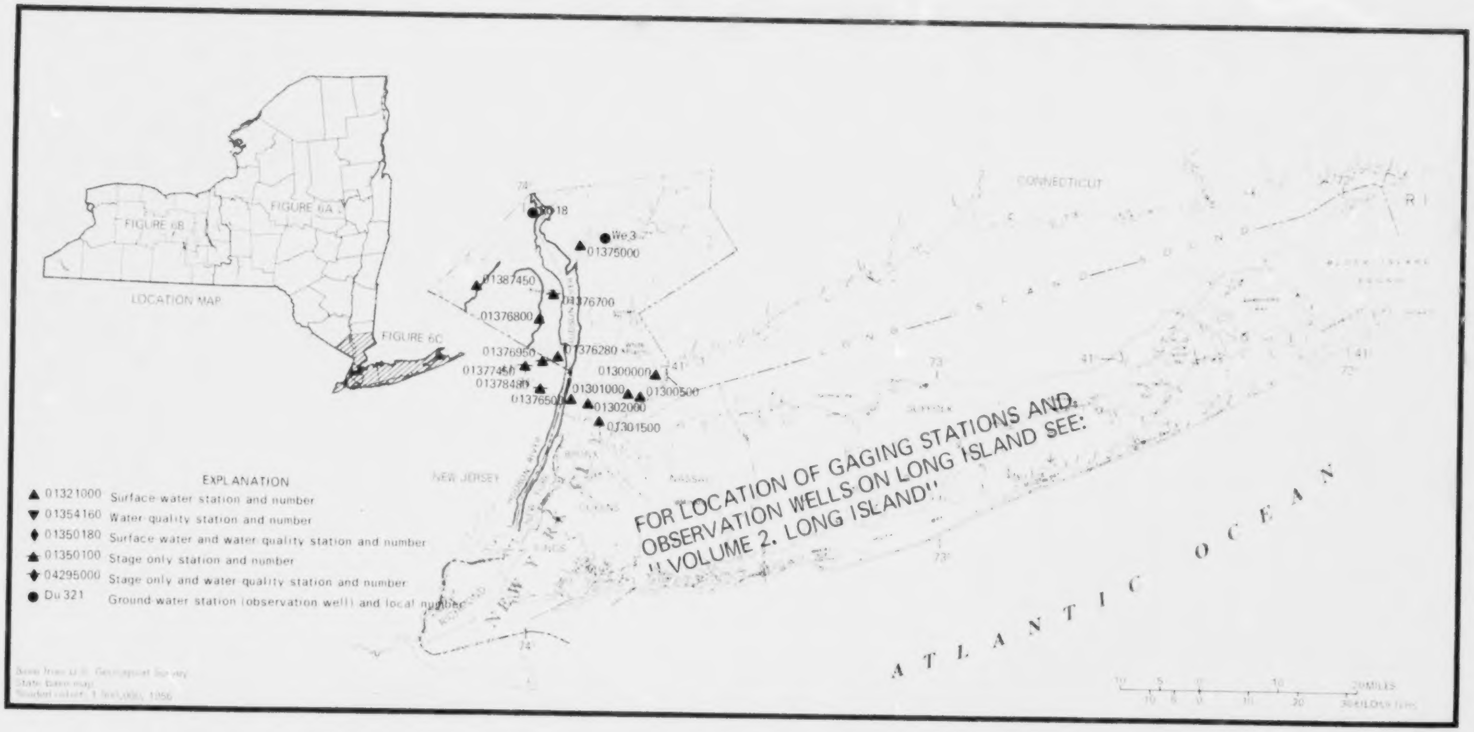

EXPLANATION
▲ 01321000 Surface-water station and number
▼ 01354160 Water-quality station and number
◆ 01350180 Surface-water and water quality station and number
★ 01350100 Stage only station and number
✦ 04295000 Stage only and water quality station and number
● Du 321 Ground water station (observation well) and local number
LAKE ONTARIO
LAKE ERIE
CANADA
PENNSYLVANIA
BUFFALO
04219640
Ni 69
Ni 70
04218592
04218000
04218190
04217500
04219940
04219950
04217000
04216000
04216200
04215900
04218518
04215000
04214500
04215500
04216418
04216500
Gs 2
04230380
04231000
04230500
04232006
04232050
04232000
04232047
04202528
04220502
04219000
04229500
04228500
04227980
04227500
04227000
04228919
04228845
04229000
04224775
04224000
04223000
Wo 1
Wo 4
04221991
04221000
04214020
04213500
04213440
03011020
Ct 121
03013000
03014500
Cu 10
03013946
Cu 5
04235250
04235000
04234500
Cd 300
04235150
04232482
04235396
04235600
04232100
Cv 7
04232400
04233500
04233000
04234000
01528700
01528000
04232450
Sb 472
Sb 471
01527000
01521000
01521500
01523500
01524500
01523000
01529000
01529500
01529950
01526500
01520500
01530380
Cm 46
01530500
01531000

FIGURE 6B.-- LOCATION OF GAGING STATIONS AND OBSERVATION WELLS


LOCATION MAP
FIGURE 6A
FIGURE 6B
FIGURE 6C
74°
Du 18
We 3
01375000
01387450
01376700
01376800
01376950
01376280
01377450
01378480
01376500
01300000
01301000
01300500
01302000
01301500
41°
73°
72°
HUDSON RIVER
NEW JERSEY
NASSAU
SUFFOLK
CONNECTICUT
R I
L O N G I S L A N D S O U N D
N E W Y O R K
A T L A N T I C O C E A N
EXPLANATION
▲ 01321000 Surface-water station and number
▼ 01354160 Water-quality station and number
♦ 01350180 Surface water and water quality station and number
▲ 01350100 Stage only station and number
♦ 04295000 Stage only and water quality station and number
● Du 321 Ground-water station (observation well) and local number
Base from U.S. Geological Survey
State base map
10 5 0 10 20 MILES
10 5 0 10 20 30 KILOMETERS

FOR LOCATION OF GAGING STATIONS AND OBSERVATION WELLS ON LONG ISLAND SEE: "VOLUME 2. LONG ISLAND"

FIGURE 6C.-- LOCATION OF GAGING STATIONS AND OBSERVATION WELLS

01300000 BLIND BROOK AT RYE, NY

LOCATION.--Lat 40°59'00", long 73°41'14", Westchester County, Hydrologic Unit 02030102, on left bank at Rye, just upstream from bridge on Theodore Fremd Avenue, 0.25 mi (0.40 km) southwest of Penn Central Transportation Co. railroad station, and 0.85 mi (1.37 km) upstream from mean high tide in Milton Harbor.

DRAINAGE AREA.--9.20 mi² (23.8 km²).

PERIOD OF RECORD.--November 1943 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 13.05 ft (3.978 m) National Geodetic Vertical Datum of 1929 (levels by City of Rye).

REMARKS.--Records good. Medium and high flows affected by detention reservoir 2 mi (3 km) upstream (capacity, about 26 acre-ft (32,1000 m³) at spillway level or 50 acre-ft (61,700 m³) at crest of concrete dam).

AVERAGE DISCHARGE.--34 years, 15.5 ft³/s (0.439 m³/s), 22.88 in/yr (581 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,320 ft³/s (65.7 m³/s) June 19, 1972, gage height, 12.44 ft (3.792 m), from floodmark in gage house, from rating curve extended above 800 ft³/s (22.7 m³/s) on basis of indirect measurement of peak flow; minimum, 0.12 ft³/s (0.003 m³/s) July 5, 1953, gage height, 0.80 ft (0.244 m), result of temporary regulation.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 406 ft³/s (11 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Nov. 8	1515	*1,440	40.8	*8.78	2.676	Jan. 26	1115	884	25.0	6.41	1.954

Minimum discharge, 1.4 ft³/s (0.040 m³/s) July 26, 27, 29, 30, 31, gage height, 0.97 ft (0.296 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.0	8.0	111	13	15	7.4	20	7.4	16	2.4	4.7	27
2	19	7.7	38	13	13	7.1	17	7.1	12	2.2	2.7	6.0
3	8.0	7.7	27	11	12	6.8	16	7.1	13	3.3	3.9	4.1
4	6.3	7.4	23	10	12	6.8	20	6.3	36	51	60	4.3
5	5.5	7.7	46	10	12	7.2	23	19	14	10	11	3.5
6	5.5	8.0	58	10	10	7.0	14	13	11	5.7	14	2.9
7	5.5	20	27	10	10	6.8	14	9.7	9.7	4.3	55	2.7
8	4.5	703	19	31	10	6.0	13	9.0	13	3.5	82	2.6
9	174	213	23	123	10	6.5	11	67	12	3.3	12	3.3
10	39	69	19	29	10	7.7	11	22	8.7	3.1	7.7	2.9
11	17	82	14	18	10	11	9.0	14	7.4	2.7	6.0	3.7
12	12	35	13	15	8.3	28	10	12	6.8	2.7	10	9.7
13	10	27	13	15	8.3	39	8.7	10	6.8	2.2	7.1	12
14	28	23	41	81	8.7	82	7.7	68	6.5	2.2	5.5	4.1
15	45	21	77	29	8.3	89	7.7	101	5.5	19	4.3	4.7
16	19	19	27	19	8.7	38	8.3	74	5.0	6.3	3.7	5.0
17	48	38	22	16	8.0	25	8.0	63	4.7	4.5	3.5	3.7
18	23	39	20	103	8.3	21	7.7	56	5.0	4.1	3.1	6.0
19	29	21	29	34	8.3	31	62	41	5.5	3.3	2.7	23
20	75	18	25	23	9.0	36	59	25	6.8	2.6	2.6	6.8
21	27	17	135	22	7.7	31	24	20	5.0	2.4	2.6	4.7
22	18	19	50	19	8.0	48	17	16	5.7	2.1	2.2	7.1
23	14	33	28	16	7.8	32	14	13	4.7	1.9	2.2	8.0
24	12	24	24	.5	7.8	35	12	147	3.9	1.9	2.1	4.7
25	11	19	33	64	7.4	24	11	144	3.7	1.8	2.2	4.1
26	13	100	26	535	8.0	31	10	49	3.7	1.5	2.7	3.5
27	14	30	18	76	7.7	205	10	30	4.3	1.5	2.6	3.3
28	11	22	15	33	7.8	53	9.7	24	3.9	1.5	4.3	3.3
29	9.3	20	13	24	---	33	8.7	20	3.1	1.5	4.3	3.5
30	8.3	30	13	20	---	24	8.0	17	2.6	1.4	2.7	3.3
31	8.0	---	13	17	---	21	---	16	---	2.7	6.5	---
TOTAL	727.9	1668.5	1040	1454	262.1	1006.3	471.5	1127.6	246.0	158.6	335.9	183.5
MEAN	23.5	56.3	33.5	46.9	9.36	32.5	15.7	36.4	8.20	5.12	10.8	6.12
MAX	174	703	135	535	15	205	62	147	36	51	82	27
MIN	4.5	7.4	13	10	7.4	6.0	7.7	6.3	2.6	1.4	2.1	2.6
CFSM	2.55	6.12	3.64	5.10	1.02	3.53	1.71	3.96	.89	.56	1.17	.67
IN.	2.94	6.83	4.20	5.88	1.06	4.07	1.91	4.56	.99	.64	1.36	.74

CAL YR 1977 TOTAL 7413.37 MEAN 20.3 MAX 703 MIN .73 CFSM 2.21 IN 29.97
WTR YR 1978 TOTAL 8701.90 MEAN 23.8 MAX 703 MIN 1.4 CFSM 2.59 IN 35.18

01300500 BEAVER SWAMP BROOK AT MAMARONECK, NY

LOCATION.--Lat 40°57'21", long 73°43'07", Westchester County, Hydrologic Unit 02030102, on right bank just downstream from bridge on Short Street, in Mamaroneck, 0.2 mi (0.3 km) downstream from Brentwood Brook, and 0.2 mi (0.3 km) upstream from tidal barrier in Guion Creek, Mamaroneck Harbor.

DRAINAGE AREA.--4.71 mi^2 (12.2 km^2).

PERIOD OF RECORD.--November 1943 to current year. Prior to October 1967, published as "near Harrison."

GAGE.--Water-stage recorder and concrete control. Datum of gage is 24.99 ft (7.617 m) National Geodetic Vertical Datum of 1929. Prior to June 8, 1946, nonrecording gage at same site and datum.

REMARKS.--Records poor. Flow affected by natural storage in swampy areas above station.

AVERAGE DISCHARGE.--34 years, 6.47 ft^3/s (0.183 m^3/s), 18.65 in/yr (474 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 258 ft^3/s (7.31 m^3/s) Nov. 9, 1977, gage height, 3.91 ft (1.192 m); no flow at times during 1944, 1953, 1959, 1964, 1965, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 86 ft^3/s (2.4 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Nov. 9	0030	*258	7.31	*3.91	1.192	Aug. 8	0245	102	2.88	1.96	0.597
May 24	1715	86	2.44	1.77	0.539						

Minimum discharge, 0.50 ft^3/s (0.014 m^3/s) July 31, gage height, 0.35 ft (0.107 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.4	3.7	36	6.0	9.0	2.9	9.9	3.7	6.9	.79	1.1	32
2	6.4	3.7	16	6.0	8.0	2.8	8.3	3.5	5.6	.69	1.0	7.9
3	4.0	3.6	12	5.4	7.0	2.8	7.1	3.3	5.8	1.4	2.3	3.7
4	2.9	3.6	10	5.0	6.0	2.8	7.1	3.4	13	19	21	2.8
5	2.3	3.8	16	5.0	5.0	2.8	8.9	9.1	6.8	5.7	7.5	2.3
6	2.7	3.3	24	5.0	4.5	2.8	7.0	5.7	5.0	2.7	7.1	2.1
7	2.3	13	14	5.0	4.3	2.8	6.7	4.5	4.4	1.6	24	1.8
8	1.9	146	10	14	4.2	2.8	6.1	5.0	5.7	1.2	65	2.5
9	44	196	12	40	4.1	3.2	5.5	19	5.2	1.2	15	2.4
10	32	60	10	20	4.0	3.5	5.1	9.3	4.0	1.2	5.8	1.6
11	11	30	8.0	10	3.9	5.3	5.5	6.3	3.3	1.0	4.3	1.6
12	7.1	15	7.0	8.0	3.8	11	5.5	5.2	3.0	.82	6.8	4.2
13	5.5	13	8.0	8.0	3.8	16	4.6	4.8	3.1	.78	4.3	3.5
14	13	12	15	30	3.7	25	4.1	21	2.8	.95	3.3	2.1
15	20	13	30	20	3.7	34	3.7	28	2.1	5.4	2.5	2.8
16	11	12	15	10	3.6	19	3.6	30	1.8	2.6	2.1	2.4
17	18	16	12	9.0	3.6	13	3.7	26	2.0	1.9	1.9	1.9
18	12	16	10	40	3.5	10	3.7	21	2.6	1.5	1.6	2.1
19	17	9.0	12	20	3.5	12	28	17	3.4	1.2	1.5	12
20	33	8.0	10	12	3.4	15	30	12	3.2	.92	1.4	5.1
21	18	7.6	50	11	3.4	14	12	9.4	2.3	1.2	1.4	3.5
22	11	8.0	25	10	3.3	18	8.5	7.4	2.1	.87	1.2	5.7
23	7.9	14	15	9.0	3.3	21	6.9	6.3	1.8	.78	1.2	5.1
24	6.7	10	12	8.0	3.2	23	6.2	47	1.2	.65	1.4	3.3
25	5.9	8.0	14	20	3.2	23	5.7	58	1.2	.59	1.4	2.9
26	6.2	36	11	140	3.1	29	5.1	27	1.2	.58	1.4	2.1
27	5.6	16	9.0	45	3.1	65	4.8	16	1.2	.58	1.4	2.3
28	4.9	12	8.0	20	3.0	37	4.7	13	1.4	.76	2.2	1.9
29	4.2	10	7.0	15	---	19	4.2	10	1.1	1.7	1.9	1.8
30	4.4	12	6.0	12	---	14	3.8	8.4	.94	1.5	1.5	1.6
31	4.0	---	6.0	10	---	11	---	7.6	---	1.4	3.7	---
TOTAL	330.3	714.3	450.0	578.4	118.2	463.5	226.0	447.9	104.14	63.16	198.2	127.0
MEAN	10.7	23.8	14.5	18.7	4.22	15.0	7.53	14.4	3.47	2.04	6.39	4.23
MAX	44	196	50	140	9.0	65	30	58	13	19	65	32
MIN	1.9	3.3	6.0	5.0	3.0	2.8	3.6	3.3	.94	.58	1.0	1.6
CFSM	2.27	5.05	3.08	3.97	.90	3.19	1.60	3.06	.74	.43	1.36	.90
IN.	2.61	5.64	3.55	4.57	.93	3.66	1.78	3.54	.82	.50	1.57	1.00

CAL YR 1977 TOTAL 3046.75 MEAN 8.35 MAX 196 MIN .14 CFSM 1.77 IN 24.06
WTR YR 1978 TOTAL 3821.10 MEAN 10.5 MAX 196 MIN .58 CFSM 2.23 IN 30.17

Note.--No gage-height record Nov. 10 to Feb. 9.

01301000 MAMARONECK RIVER AT MAMARONECK, NY

LOCATION.--Lat 40°57'14", long 73°44'06", Westchester County, Hydrologic Unit 02030102, on left bank in Mamaroneck, 113 ft (34 m) downstream from bridge on Halstead Avenue, 700 ft (213 m) downstream from Sheldrake River, and 0.3 mi (0.5 km) upstream from mean high tide in Mamaroneck Harbor.

DRAINAGE AREA.--23.4 mi² (60.6 km²).

PERIOD OF RECORD.--November 1943 to July 1953, September 1954 to current year.

REVISED RECORDS.--WSP 1502: 1944(M), 1951(M). WDR NY-76-1; 1972(M), 1973(M), 1974(M), 1975(M).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 11.46 ft (3.493 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 10, 1954, water-stage recorder at same site at datum 0.41 ft (0.125 m) higher.

REMARKS.--Records good except those for winter periods, which are fair. Storage in former water-supply reservoir on Mamaroneck River, affect unknown.

AVERAGE DISCHARGE.--32 years (1944-52, 1954-78), 34.2 ft³/s (0.969 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,700 ft³/s (105 m³/s) Sept. 26, 1975, gage height, 10.15 ft (3.094 m), from rating curve extended above 2,000 ft³/s (56.6 m³/s) on basis of indirect measurement of peak flow at 10.15 ft (3.094 m); minimum, 0.06 ft³/s (0.002 m³/s) Sept. 30, 1965; minimum daily, 0.10 ft³/s (0.003 m³/s) Sept. 29, 30, 1965; minimum gage height since Sept. 9, 1954, 0.10 ft (0.030 m) July 21, 22, Aug. 18, 19, 1957, Aug. 14, 1966.

EXTREMES OUTSIDE PERIOD OF RECORD.--Backwater from hurricane wave reached a stage of about 11.5 ft (3.51 m) present datum, Sept. 21, 1938, from information by officials of village of Mamaroneck.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,240 ft³/s (91.8 m³/s) Nov. 8, gage height, 8.86 ft (2.701 m); minimum, 2.2 ft³/s (0.062 m³/s) Aug. 23, gage height, 0.29 ft (0.088 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	20	156	36	73	19	80	29	47	6.3	12	95
2	45	19	107	35	68	19	71	26	45	5.8	6.3	17
3	21	19	91	32	61	19	65	24	46	7.4	19	12
4	16	20	82	29	50	20	56	22	55	71	109	11
5	14	21	100	28	40	31	55	31	44	50	68	9.3
6	14	21	111	28	30	21	46	30	47	40	42	8.7
7	13	59	93	27	30	18	44	29	51	31	95	8.0
8	10	1690	76	46	30	17	36	29	54	12	173	8.7
9	218	555	75	124	30	18	32	64	39	10	83	12
10	140	225	56	85	29	21	31	50	5.4	9.3	68	6.9
11	105	201	61	76	28	26	31	46	4.0	8.7	46	9.3
12	75	124	48	70	26	46	35	44	21	8.0	39	29
13	42	111	33	64	26	55	30	42	54	6.9	27	35
14	59	96	68	111	27	107	27	95	41	7.4	19	12
15	96	78	89	82	25	140	25	180	33	36	18	13
16	59	69	71	75	24	115	25	187	29	15	16	13
17	98	78	70	70	23	107	24	154	18	12	14	8.7
18	73	78	68	105	23	96	24	152	15	9.3	12	18
19	76	73	73	95	23	96	89	117	17	7.4	8.7	59
20	154	65	66	83	22	85	109	71	17	6.3	8.0	20
21	117	51	228	80	21	73	64	58	13	6.3	7.4	14
22	76	50	138	75	20	82	55	50	16	5.8	6.9	21
23	45	65	91	66	20	75	51	48	12	6.3	5.4	20
24	39	64	80	54	20	75	50	274	10	6.3	6.3	12
25	37	54	76	102	20	68	51	289	9.3	6.0	6.9	9.3
26	41	109	78	972	22	71	48	142	8.7	5.0	6.3	8.0
27	39	85	71	208	21	312	45	96	12	5.4	5.8	7.4
28	32	76	64	115	20	154	35	80	9.3	5.8	12	6.9
29	23	66	59	43	---	105	33	65	7.4	4.9	12	6.9
30	22	70	61	73	---	95	31	50	6.9	4.4	8.0	5.8
31	20	---	46	73	---	87	---	48	---	10	20	---
TOTAL	1843	4311	2586	3263	852	2283	1399	2622	787.0	426.0	980.0	516.9
MEAN	59.5	144	83.4	105	30.4	73.6	46.6	84.6	26.2	13.7	31.6	17.2
MAX	218	1690	228	972	73	312	109	289	55	71	173	95
MIN	10	19	33	27	20	17	24	22	4.0	4.4	5.4	5.8

CAL YR 1977 TOTAL 18945.4 MEAN 51.9 MAX 1690 MIN 2.2
WTR YR 1978 TOTAL 21868.9 MEAN 59.9 MAX 1690 MIN 4.0

01301500 HUTCHINSON RIVER AT PELHAM, NY

LOCATION.--Lat 40°54'41", long 73°48'55", Westchester County, Hydrologic Unit 02030102, on right bank in Pelham, just upstream from Penn Central Transportation Co. bridge, 100 ft (30 m) downstream from Pelham Lake, and 1.5 mi (2.4 km) west of New Rochelle.

DRAINAGE AREA.--5.76 mi^2 (14.9 km^2).

PERIOD OF RECORD.--November 1943 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 12.92 ft (3.938 m) National Geodetic Vertical Datum of 1929 (levels by county of Westchester).

REMARKS.--Records fair. Flow controlled by Pelham Lake and three reservoirs above station.

AVERAGE DISCHARGE.--34 years (1944-78), 7.01 ft^3/s (0.199 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 526 ft^3/s (14.9 m^3/s) Aug. 28, 1971, gage height, 5.18 ft (1.579 m), from rating curve extended above 200 ft^3/s (5.66 m^3/s); minimum, 0.01 ft^3/s (<0.001 m^3/s) July 27, 1957; minimum daily, 0.02 ft^3/s (0.001 m^3/s) Aug. 2-6, 1955, July 26, 27, 1957, Oct. 26-30; 1964; minimum gage height, 1.86 ft (0.567 m) Aug. 2, 5, 1955.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 420 ft^3/s (11.9 m^3/s) Nov. 8, gage height, 5.16 ft (1.573 m); minimum, 0.62 ft^3/s (0.018 m^3/s) July 31, Aug. 31, gage height, 2.23 ft (0.680 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.1	4.1	38	5.8	7.0	3.3	7.3	4.8	8.5	1.1	1.4	24
2	5.1	4.4	22	5.8	6.1	3.1	7.0	4.8	7.0	.91	1.0	11
3	4.8	4.8	13	5.8	5.6	3.1	6.7	4.6	10	2.3	2.3	7.0
4	3.3	6.4	9.9	5.6	5.1	3.3	6.1	4.6	17	33	28	5.6
5	2.3	6.7	19	5.6	4.6	3.2	7.9	9.6	11	22	16	5.6
6	2.5	6.4	23	4.8	4.4	3.1	7.0	7.3	7.9	9.9	12	4.8
7	1.7	17	16	4.8	5.0	2.9	6.7	6.7	6.4	6.1	32	3.3
8	1.6	180	11	12	4.8	2.9	5.8	5.8	6.7	5.1	67	2.9
9	38	147	10	35	4.5	3.1	5.6	20	6.7	4.4	18	2.8
10	28	33	8.5	22	4.4	3.3	5.1	14	6.4	3.9	9.2	1.4
11	12	28	7.0	11	4.1	5.1	4.8	8.2	5.6	3.1	7.0	1.4
12	6.4	17	5.8	7.6	3.9	8.9	5.6	6.1	5.1	2.5	9.9	9.6
13	4.1	12	6.1	7.0	3.9	13	5.1	5.1	4.8	2.1	6.7	3.7
14	7.6	9.2	18	36	4.1	20	4.8	26	4.4	1.7	6.1	1.9
15	14	7.3	32	21	4.0	26	4.8	45	3.9	9.9	5.6	2.9
16	9.6	6.4	18	12	3.9	18	4.4	30	3.9	2.9	4.8	2.3
17	14	14	11	8.5	3.7	13	3.9	22	3.7	3.3	3.9	1.9
18	11	14	9.6	44	3.7	9.6	3.7	20	3.7	3.1	2.9	2.5
19	14	9.9	15	27	3.6	8.9	31	16	3.3	2.8	2.3	9.2
20	31	7.9	12	17	3.5	9.2	38	12	3.1	2.5	1.9	5.6
21	17	7.0	46	14	3.3	9.6	17	9.2	3.1	2.1	1.6	4.8
22	8.5	7.0	40	9.6	3.1	12	10	7.6	2.9	1.9	1.4	5.6
23	7.0	14	19	7.9	3.1	11	7.6	6.7	2.3	1.4	1.4	4.4
24	6.1	11	13	7.0	3.3	11	5.6	36	2.1	1.1	1.4	4.1
25	5.1	8.5	14	26	3.2	8.9	6.1	55	1.7	1.0	1.1	3.7
26	5.1	35	12	201	3.4	12	5.8	32	2.3	1.1	1.0	3.1
27	4.6	19	9.2	68	3.3	50	5.6	18	2.1	1.0	.91	2.9
28	4.1	11	7.6	22	3.5	32	5.6	13	1.6	1.6	2.9	2.8
29	5.6	14	6.7	13	---	15	5.3	9.9	1.4	1.1	1.4	2.3
30	6.4	12	6.1	9.6	---	10	5.1	8.5	1.1	.80	.91	2.1
31	5.1	---	6.1	7.9	---	8.2	---	11	---	2.1	3.9	---
TOTAL	290.7	674.0	484.6	684.3	116.1	342.7	245.0	479.5	149.7	137.81	255.92	145.2
MEAN	9.38	22.5	15.6	22.1	4.15	11.1	8.17	15.5	4.99	4.45	8.26	4.84
MAX	38	180	46	201	7.0	50	38	55	17	33	67	24
MIN	1.6	4.1	5.8	4.8	3.1	2.9	3.7	4.6	1.1	.80	.91	1.4

CAL YR 1977 TOTAL 3701.50 MEAN 10.1 MAX 180 MIN .28
WTR YR 1978 TOTAL 4005.53 MEAN 11.0 MAX 201 MIN .80

01302000 BRONX RIVER AT BRONXVILLE, NY

LOCATION.--Lat 40°56'09", long 73°50'10", Westchester County, Hydrologic Unit 02030102, on right bank in Bronxville, just upstream from Penn Central Transportation Co. bridge, and 800 ft (244 m) downstream from Grassy Sprain Brook.

DRAINAGE AREA.--26.5 mi² (68.6 km²), not including 18.1 mi² (46.9 km²), from which the entire flow is diverted for municipal water supply and drainage purposes.

PERIOD OF RECORD.--November 1943 to current year.

REVISED RECORDS.--WSP 1382: Drainage area. WRD NY 1971: 1961-67(P), 1968(M), 1970(M). WRD NY 1972: 1969(M).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 73.74 ft (22.476 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Diversions from 18.1 mi² (46.9 km²) for municipal water supply and flood control use. Included in these diversions is drainage from 12.8 mi² (33.2 km²) from Kensico Reservoir for City of New York, 4.58 mi² (11.9 km²) from Grassy Sprain Reservoir for Yonkers, 0.67 mi² (1.74 km²) for White Plains, and 0.1 mi² (0.3 km²) for flood control from outflow from Grassy Sprain Reservoir.

AVERAGE DISCHARGE.--34 years (1944-78), 41.1 ft³/s (1.164 m³/s), 21.06 in/yr (535 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,500 ft³/s (70.8 m³/s) June 19, 1972, gage height, 9.63 ft (2.935 m), from rating curve extended above 1,200 ft³/s (34.0 m³/s) on basis of flow through culvert computation of peak flow; minimum, 1.0 ft³/s (0.028 m³/s) Sept. 10, 1944, gage height, 0.14 ft (0.043 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 525 ft³/s (14.9 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Nov. 8	1730	*1,630	46.2	*7.48	2.280	May 14	1930	525	14.9	3.44	1.049
Jan. 26	1100	1,290	36.5	6.40	1.951	July 4	0530	564	16.0	3.61	1.100

Minimum discharge, 9.8 ft³/s (0.28 m³/s) Sept. 8, 10, 28, 29, 30, gage height, 0.50 ft (0.152 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	21	209	48	72	26	64	30	69	15	28	115
2	52	21	85	48	69	24	57	29	50	14	15	20
3	20	21	72	43	64	23	53	29	93	31	57	14
4	15	25	64	39	57	24	52	27	90	259	143	12
5	14	22	93	39	53	23	63	67	48	41	38	12
6	16	22	106	39	51	22	49	37	41	26	48	12
7	17	76	67	38	50	22	50	30	50	21	101	11
8	14	980	57	78	49	21	47	32	48	19	184	15
9	242	441	67	184	48	26	43	136	38	18	36	20
10	62	195	53	64	45	30	42	49	35	17	27	10
11	34	160	48	50	43	37	44	37	32	16	23	14
12	30	100	43	44	42	59	48	34	31	15	44	59
13	26	84	46	46	41	67	37	32	33	14	25	42
14	63	71	136	168	41	130	36	180	28	14	21	14
15	74	64	134	63	40	120	35	174	27	103	18	18
16	36	60	64	50	38	71	34	152	25	24	18	16
17	82	110	57	46	37	63	32	118	26	21	17	12
18	41	79	57	203	35	52	32	145	28	18	15	27
19	76	56	75	76	34	53	195	117	29	17	14	84
20	122	49	62	67	34	60	112	78	23	16	14	21
21	50	49	274	63	33	60	53	67	26	14	13	14
22	37	52	123	57	32	92	45	58	24	14	13	31
23	32	85	85	54	30	71	41	53	20	12	12	21
24	31	54	78	53	28	78	39	230	19	12	12	13
25	29	48	93	151	27	59	38	226	18	12	12	12
26	40	202	74	870	29	82	37	115	29	12	13	11
27	35	68	62	210	29	36	37	85	22	11	12	11
28	27	62	56	132	27	123	36	75	18	13	19	11
29	23	56	51	107	---	95	33	67	17	11	15	10
30	22	75	49	90	---	76	31	61	16	11	12	10
31	21	---	49	81	---	68	---	58	---	31	36	---
TOTAL	1420	3408	2589	3301	1178	2093	1515	2628	1053	872	1055	692
MEAN	45.8	114	83.5	106	42.1	67.5	50.5	84.8	35.1	28.1	34.0	23.1
MAX	242	980	274	870	72	336	195	230	93	259	184	115
MIN	14	21	43	38	27	21	31	27	16	11	12	10
CFSM	1.73	4.30	3.15	4.00	1.59	2.55	1.91	3.20	1.33	1.06	1.28	.87
IN.	1.99	4.78	3.63	4.63	1.65	2.94	2.13	3.69	1.48	1.22	1.48	.97

CAL YR 1977 TOTAL 18777.8 MEAN 51.4 MAX 980 MIN 7.1 CFSM 1.94 IN 26.36
WTR YR 1978 TOTAL 21804.0 MEAN 59.7 MAX 980 MIN 10 CFSM 2.25 IN 30.61

01312000 HUDSON RIVER NEAR NEWCOMB, NY

LOCATION.--Lat 43°58'00", long 74°07'55", Essex County, Hydrologic Unit 02020001, on right bank 30 ft (9 m) downstream from bridge on State Highway 28N, 0.5 mi (0.8 km) downstream from outlet of Harris Lake, 2 mi (3 km) east of Newcomb, and 4 mi (6 km) upstream from Wolf Creek.

DRAINAGE AREA.--192 mi² (497 km²).

PERIOD OF RECORD.--September 1925 to current year.

REVISED RECORDS.--WSP 696: 1928(M). WSP 711: 1930(m).

GAGE.--Water-stage recorder. Datum of gage is 1,550.38 ft (472.556 m) National Geodetic Vertical Datum of 1929. Prior to Aug. 6, 1931, nonrecording gage at site 125 ft (38 m) downstream at same datum. Aug. 6, 1931 to Nov. 4, 1960, water-stage recorder on left bank at same site and datum.

REMARKS.--Records fair except those for winter periods, which are poor. Flow slightly regulated by small reservoirs above station.

AVERAGE DISCHARGE.--53 years, 396 ft³/s (11.21 m³/s), 28.01 in/yr (711 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,440 ft³/s (211 m³/s) Jan. 1, 1949, gage height, 11.40 ft (3.475 m); minimum, 11 ft³/s (0.31 m³/s) Sept. 3, 1934.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,500 ft³/s (71 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 18	2000	3,030	85.8	6.69	2.039	May 10	1900	*3,170	89.8	*6.87	2.094

Minimum discharge, 57 ft³/s (1.61 m³/s) July 26, 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1260	290	370	190	437	127	402	1870	452	89	240	153
2	1850	270	602	190	382	123	437	1400	362	82	228	130
3	2070	252	760	180	334	121	509	1070	296	75	219	117
4	1720	264	696	180	305	125	518	901	252	69	302	109
5	1360	514	572	162	280	127	522	890	216	67	324	99
6	1070	665	509	153	260	125	628	1050	222	65	270	91
7	845	593	480	147	260	123	717	1210	219	62	282	87
8	675	518	414	150	250	121	680	1370	237	62	270	80
9	691	526	378	342	240	119	589	1830	330	89	228	75
10	1380	563	342	1370	230	117	509	2900	324	103	197	69
11	1480	701	308	1710	220	111	543	2720	270	97	171	80
12	1160	982	287	1360	210	105	918	2110	228	87	159	305
13	901	879	276	1020	200	93	1450	1830	197	79	162	518
14	717	712	279	793	190	93	1830	1760	197	73	150	425
15	651	580	324	637	180	142	1810	1750	209	72	137	327
16	712	501	437	526	180	177	1450	1670	197	80	125	287
17	1170	460	452	445	170	177	1150	1610	171	127	117	276
18	2740	489	410	410	160	159	1000	1570	174	115	111	252
19	2640	530	362	366	160	145	1090	1290	243	97	105	219
20	1920	489	324	334	160	135	1180	1150	293	84	109	194
21	1470	445	305	320	150	127	1370	1220	282	77	107	171
22	1190	441	293	300	150	145	1430	1360	255	72	101	151
23	1010	441	287	290	140	165	1480	1100	222	69	93	130
24	827	452	267	270	140	168	1550	839	191	65	97	115
25	675	472	250	264	140	159	1720	701	165	61	121	104
26	598	472	250	299	130	159	1860	606	142	58	145	92
27	530	445	240	518	130	191	2060	534	125	70	142	83
28	476	402	230	805	132	311	2260	464	117	216	135	79
29	418	366	230	760	---	460	2370	402	107	279	150	77
30	366	327	220	611	---	526	2270	414	101	270	191	71
31	321	---	210	509	---	468	---	464	---	264	183	---
TOTAL	34893	15041	11364	15611	5920	5444	36302	40055	6796	3175	5371	4966
MEAN	1126	501	367	504	211	176	1210	1292	227	102	173	166
MAX	2740	982	760	1710	437	526	2370	2900	452	279	324	518
MIN	321	252	210	147	130	93	402	402	101	58	93	69
CFSM	5.87	2.61	1.91	2.63	1.10	.92	6.30	6.73	1.18	.53	.90	.87
IN.	6.76	2.91	2.20	3.02	1.15	1.05	7.03	7.76	1.32	.62	1.04	.96

CAL YR 1977 TOTAL 195099 MEAN 535 MAX 3360 MIN 54 CFSM 2.79 IN 37.80
WTR YR 1978 TOTAL 184938 MEAN 507 MAX 2900 MIN 58 CFSM 2.64 IN 35.83

01314500 INDIAN LAKE NEAR INDIAN LAKE, NY

LOCATION.--Lat 43°45'20", long 74°16'35", Hamilton County, Hydrologic Unit 02020001, at Indian Lake Dam on Indian River, and 2.0 mi (3.2 km) south of village of Indian Lake.

DRAINAGE AREA.--131 mi^2 (339 km^2).

PERIOD OF RECORD.--July 1900 to current year. Prior to October 1956, published as "Indian Lake Reservoir near Indian Lake."

GAGE.--Nonrecording gage read once daily. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Reservoir is formed by masonry dam, completed in 1898. Usable capacity, about 4,500 mil ft^3 (127 hm^3) at elevation, 1,651.29 ft or 503.313 m (crest of spillway). Sills of double sluice gates at lowest outlet at elevation 1,615.50 ft (492.404 m). Dead storage unknown. Water is used for power development, for improvement of navigation in lower Hudson River, and to compensate for flow diverted from Hudson River at Glens Falls into Champlain (Barge) Canal.

COOPERATION.--Gage-height record furnished by Indian River Co.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 1,656.71 ft (504.965 m) Mar. 28, 1913, contents, 5,781 mil ft^3 (164 hm^3); minimum observed, 1,616.81 ft (492.804 m), estimated, Feb. 13, 1948, contents, 199 mil ft^3 (5.64 hm^3).

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 1,652.76 ft (503.761 m) Oct. 19, contents, 4,960 mil ft^3 (140 hm^3); minimum observed, 1,635.19 ft (498.406 m) Mar. 26, contents 1,987 mil ft^3 (56.3 hm^3).

Capacity table, current water year
(elevation, in feet and capacity, in billions of cubic feet)

1,635.0	1.958	1,643.0	3.221
1,636.0	2.110	1,648.0	4.068
1,638.0	2.417	1,653.0	5.007

ELEVATION, IN FEET ABOVE NGVD, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
INSTANTANEOUS OBSERVATIONS AT 0630

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1651.78	1650.91	1649.79	1646.07	1644.37	1639.11	1635.93	1646.18	1652.03	1649.85	1649.79	1649.73
2	1652.41	1650.79	1649.74	1645.88	1644.20	1638.94	1636.01	1646.66	1652.00	1649.82	1649.83	1649.69
3	1652.74	1650.71	1649.95	1645.65	1644.05	1638.75	1636.02	1646.95	1651.91	1649.77	1649.87	1649.61
4	1652.74	1650.53	1649.81	1645.43	1643.85	1638.57	1636.00	1647.26	1651.76	1649.73	1649.87	1649.58
5	1652.60	1650.46	1649.71	1645.28	1643.66	1638.36	1636.06	1647.70	1651.68	1649.72	1649.90	1649.55
6	1652.39	1650.39	1649.65	1645.07	1643.58	1638.16	1636.08	1648.10	1651.56	1649.71	1649.89	1649.51
7	1652.15	1650.37	1649.48	1644.91	1643.50	1637.92	1636.09	1648.46	1651.39	1649.69	1649.89	1649.50
8	1651.94	1650.33	1649.41	1644.73	1643.40	1637.74	1636.11	1648.88	1651.31	1649.69	1649.86	1649.49
9	1651.98	1650.44	1649.39	1644.90	1643.13	1637.55	1636.14	1649.56	1651.22	1649.67	1649.82	1649.41
10	1652.39	1650.58	1649.25	1645.53	1642.91	1637.36	1636.23	1650.61	1651.07	1649.66	1649.89	1649.35
11	1652.62	1650.73	1649.09	1645.82	1642.67	1637.16	1636.18	1651.44	1650.98	1649.57	1649.90	1649.29
12	1652.56	1650.94	1648.91	1645.96	1642.44	1636.97	1636.30	1651.92	1650.76	1649.57	1650.01	1649.48
13	1652.40	1650.93	1648.76	1645.99	1642.21	1636.77	1636.84	1652.29	1650.67	1649.55	1650.11	1649.73
14	1652.20	1650.96	1648.61	1646.04	1642.00	1636.56	1637.49	1652.48	1650.53	1649.53	1650.14	1649.85
15	1652.05	1650.94	1648.44	1645.96	1641.78	1636.57	1638.16	1652.58	1650.27	1649.52	1650.12	1649.92
16	1652.06	1650.88	1648.38	1645.87	1641.57	1636.44	1638.48	1652.62	1650.09	1649.51	1650.09	1649.89
17	1652.05	1650.78	1648.24	1645.77	1641.44	1636.33	1638.63	1652.68	1649.92	1649.55	1650.09	1649.81
18	1652.59	1650.73	1648.10	1645.63	1641.27	1636.20	1638.77	1652.61	1649.85	1649.54	1650.07	1649.72
19	1652.76	1650.72	1647.97	1645.48	1641.06	1636.05	1639.07	1652.61	1649.73	1649.51	1650.00	1649.67
20	1652.69	1650.70	1647.82	1645.36	1640.94	1635.91	1639.37	1652.55	1649.54	1649.49	1650.00	1649.61
21	1652.55	1650.62	1647.79	1645.22	1640.79	1635.82	1639.67	1652.51	1649.61	1649.48	1649.98	1649.60
22	1652.37	1650.59	1647.56	1645.09	1640.51	1635.67	1639.96	1652.44	1649.69	1649.44	1649.92	1649.54
23	1652.20	1650.50	1647.42	1644.95	1640.32	1635.50	1640.26	1652.37	1649.78	1649.42	1649.86	1649.45
24	1652.11	1650.42	1647.27	1644.80	1640.09	1635.35	1640.55	1652.37	1649.80	1649.40	1649.84	1649.39
25	1651.95	1650.34	1647.12	1644.65	1639.89	1635.24	1641.32	1652.32	1649.84	1649.38	1649.86	1649.37
26	1651.76	1650.25	1646.95	1644.60	1639.73	1635.19	1642.09	1652.26	1649.87	1649.37	1649.84	1649.22
27	1651.59	1650.17	1646.81	1644.49	1639.51	1635.41	1642.93	1652.20	1649.84	1649.33	1649.81	1649.17
28	1651.43	1650.13	1646.71	1644.53	1639.34	1635.64	1643.81	1652.14	1649.86	1649.54	1649.77	1649.12
29	1651.30	1650.04	1646.60	1644.55	---	1635.76	1644.87	1652.08	1649.83	1649.56	1649.79	1649.07
30	1651.19	1649.86	1646.46	1644.54	---	1635.86	1645.53	1652.03	1649.86	1649.70	1649.78	1648.97
31	1651.06	---	1646.27	1644.52	---	1635.90	---	1651.99	---	1649.74	1649.77	---
MEAN	1652.15	1650.56	1648.31	1645.27	1641.94	1636.73	1638.70	1650.93	1650.54	1649.58	1649.91	1649.51
MAX	1652.76	1650.96	1649.95	1646.07	1644.37	1639.11	1645.53	1652.68	1652.03	1649.85	1650.14	1649.92
MIN	1651.06	1649.86	1645.27	1644.49	1639.34	1635.19	1635.93	1646.18	1649.54	1649.33	1649.77	1648.97
†	4.614	4.385	3.761	3.457	2.608	2.096	3.727	4.810	4.385	4.385	4.367	4.227
‡	-58.3	-79.5	-233	-113	-351	-191	+629	+404	-164	0	-6.71	-54.0

CAL YR 1977 MEAN 1646.88 MAX 1652.79 MIN 1632.67 ‡ +20.2
WTR YR 1978 MEAN 1647.05 MAX 1652.76 MIN 1635.19 ‡ -17.2

† Contents, in billions of cubic feet, at 2400 hours on last day of month, by interpolation.
‡ Change in contents, equivalent in cubic feet per second.

01315000 INDIAN RIVER NEAR INDIAN LAKE, NY

LOCATION.--Lat 43°45'30", long 74°16'05", Hamilton County, Hydrologic Unit 02020001, on right bank 0.8 mi (1.3 km) downstream from Indian Lake Dam, 1.0 mi (1.6 km) upstream from Big Brook, and 2.0 mi (3.2 km) south of village of Indian Lake.

DRAINAGE AREA.--132 mi^2 (342 km^2).

PERIOD OF RECORD.--July 1912 to June 1914, June 1915 to current year. Monthly discharge only for some periods published in WSP 1302.

GAGE.--Water-stage recorder. Datum of gage is 1,604.23 ft (488.969 m) National Geodetic Vertical Datum of 1929. Prior to Aug. 30, 1916, nonrecording gage at same site and datum.

REMARKS.--Records good. Flow regulated by Indian Lake (see station 01314500).

AVERAGE DISCHARGE.--64 years (1913, 1916-78), 294 ft^3/s (8.326 m^3/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,460 ft^3/s (98.0 m^3/s) Mar. 28, 1913, gage height, 7.8 ft (2.38 m); minimum, less than 1 ft^3/s (0.028 m^3/s) frequently, when entire flow of river is being stored in Indian Lake.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,020 ft^3/s (28.9 m^3/s) Oct. 3, gage height, 4.05 ft (1.234 m); minimum, 11 ft^3/s (0.31 m^3/s) May 3, 4, 5, 8, gage height, 0.49 ft (0.149 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	764	480	609	567	548	470	431	13	315	63	16	105
2	886	470	606	567	546	471	430	12	363	63	15	105
3	1000	460	604	562	542	468	429	12	457	63	16	105
4	984	450	603	564	540	466	429	11	438	63	67	105
5	926	440	603	560	538	464	432	11	462	63	74	105
6	857	440	600	558	535	460	431	12	545	64	73	105
7	803	440	600	555	533	457	433	12	531	64	73	105
8	765	440	600	556	530	454	432	11	529	64	73	105
9	783	450	600	580	528	451	432	15	525	63	73	105
10	877	450	600	569	526	448	432	14	524	64	73	107
11	907	450	600	570	523	445	418	18	523	63	73	110
12	873	460	600	571	520	441	361	132	519	63	77	109
13	829	470	600	572	517	438	369	411	518	64	73	108
14	791	470	600	572	514	437	369	455	516	63	88	107
15	780	483	600	571	512	436	371	637	516	64	107	150
16	800	483	600	570	507	433	375	745	515	66	107	202
17	820	483	580	568	504	432	376	752	439	65	107	202
18	940	484	580	568	500	430	380	740	381	65	107	200
19	980	484	580	565	497	428	380	733	317	65	107	200
20	960	483	580	564	494	425	383	736	104	65	106	200
21	880	483	580	563	491	424	385	693	69	65	106	200
22	860	538	580	560	488	424	388	618	30	65	106	200
23	820	604	580	558	484	423	391	431	29	66	105	200
24	800	606	580	556	481	421	229	415	29	65	106	200
25	780	604	580	554	478	420	16	394	29	66	105	200
26	760	606	580	558	480	419	16	381	36	66	105	200
27	740	605	580	557	480	425	16	353	64	44	105	200
28	600	606	580	555	480	426	16	339	64	16	106	200
29	500	606	580	554	---	425	15	352	64	16	105	200
30	500	604	580	554	---	426	14	337	63	16	105	190
31	480	---	580	550	---	427	---	329	---	16	105	---
TOTAL	25045	15132	18325	17448	14316	13614	9579	10124	9514	1778	2664	4630
MEAN	808	504	591	563	511	439	319	327	317	57.4	85.9	154
MAX	1000	606	609	580	548	471	433	752	545	66	107	202
MIN	480	440	580	550	478	419	14	11	29	16	15	105

CAL YR 1977 TOTAL 136341 MEAN 374 MAX 1000 MIN 15
WTR YR 1978 TOTAL 142169 MEAN 390 MAX 1000 MIN 11

01315500 HUDSON RIVER AT NORTH CREEK, NY

LOCATION.--Lat 43°42'03", long 73°59'02", Warren County, Hydrologic Unit 02020001, on left bank 125 ft (38 m) upstream from bridge on State Highway 28N in village of North Creek, 500 ft (152 m) upstream from North Creek, and 26 mi (42 km) downstream from Indian Lake.

DRAINAGE AREA.--792 mi² (2,051 km²).

PERIOD OF RECORD.--September 1907 to current year.

REVISED RECORDS.--WSP 621: Drainage area. WSP 1432: 1908-18, 1920, 1922.

GAGE.--Water-stage recorder. Datum of gage is 987.51 ft (300.993 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 15, 1930, nonrecording gages at sites 80 ft (24 m) and 125 ft (38 m) downstream at same datum.

REMARKS.--Records good except those for winter periods, which are fair. Appreciable regulation by Indian Lake (see station 01314500) and other reservoirs above station.

AVERAGE DISCHARGE.--71 years, 1,557 ft³/s (44.09 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 28,900 ft³/s (818 m³/s) Dec. 31, 1948, gage height, 12.14 ft (3.700 m); minimum, 112 ft³/s (3.17 m³/s) July 26, 1934, gage height, 1.96 ft (0.597 m); minimum daily, 114 ft³/s (3.23 m³/s) July 26, 1934.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8,620 ft³/s (244 m³/s) Oct. 18, gage height, 7.52 ft (2.292 m); minimum, 237 ft³/s (6.71 m³/s) July 26, 27, gage height, 2.22 ft (0.677 m); minimum daily, 244 ft³/s (6.91 m³/s) July 26.

REVISIONS.--Revised daily discharges and revised monthly summaries, in cubic feet per second, for water year 1977 are given below. These figures supersede those published in WDR NY-77-1.

June 4, 1977	992	June 22, 1977	496	July 10, 1977	337	July 29, 1977	329
5	879	23	469	11	320	30	342
6	830	24	447	12	312	31	350
7	939	25	432	13	373	Aug. 1, 1977	387
8	871	26	463	14	508	2	407
9	846	27	480	15	469	3	387
10	806	28	458	16	442	4	369
11	798	29	447	17	463	5	364
12	806	30	458	18	474	6	378
13	798	July 1, 1977	442	19	442	7	485
14	798	2	422	20	412	8	491
15	694	3	387	21	397	9	453
16	502	4	360	22	474	10	417
17	496	5	342	23	447	11	417
18	458	6	324	24	427	12	447
19	485	7	312	25	402	13	474
20	485	8	324	26	383	14	480
21	514	9	346	27	360	15	612
				28	346	16	790

	JUNE	JULY	AUG.	WTR YR 1977
TOTAL	19888	12068	28384	673719
MEAN	663	389	916	1846
MAX	1060	508	2370	13500
MIN	432	312	364	312

01315500 HUDSON RIVER AT NORTH CREEK, NY--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4240	1390	2110	1430	2170	900	2190	5750	1570	383	555	417
2	7270	1340	3240	1360	1950	880	2720	4420	1470	359	508	383
3	6700	1280	3410	1320	1750	860	2860	3680	1510	333	463	359
4	5470	1340	3050	1290	1620	840	2640	3320	1380	316	745	346
5	4380	1770	2630	1290	1520	840	2610	3310	1260	304	806	337
6	3590	2250	2380	1260	1400	820	2840	3590	1400	296	666	320
7	3170	2230	2100	1260	1400	820	3020	3910	1310	288	568	312
8	2600	2050	1900	1420	1400	800	2920	4300	1430	280	543	308
9	2920	2500	1800	4570	1300	780	2720	5660	1550	273	502	292
10	4900	2740	1700	6750	1300	800	2520	8010	1570	288	458	277
11	4880	3590	1600	6110	1200	790	2750	7330	1430	300	422	320
12	4160	4100	1500	5050	1200	800	4260	5580	1290	288	502	1140
13	3090	3550	1600	4140	1200	800	5800	4990	1190	277	652	1740
14	2880	2960	1700	3410	1100	820	7480	4840	1150	280	652	1360
15	3050	2530	1990	2920	1100	1000	6390	4880	1110	273	549	1000
16	3270	2220	2300	2570	1100	1150	5210	5010	1080	316	474	871
17	5710	2130	2330	2250	1100	1200	4380	5400	1010	525	432	798
18	8470	2310	2160	2080	1000	1150	4220	5090	846	508	402	745
19	7380	2430	1930	1990	1000	1100	4780	4530	1010	392	373	694
20	5600	2190	1780	1890	1000	1100	5030	3930	1000	337	364	645
21	4470	2100	1750	1820	960	1100	5470	3870	896	304	364	606
22	3770	2220	1740	1750	930	1200	5320	4040	798	288	355	580
23	3290	2350	1710	1710	940	1350	5580	3320	694	273	342	680
24	2940	2330	1700	1610	940	1500	5890	2830	599	262	350	422
25	2610	2430	1670	1560	940	1400	6180	2450	531	251	407	463
26	2350	2460	1700	2160	940	1300	6700	2170	480	244	447	463
27	2140	2310	1600	3150	930	1800	7300	1920	453	262	447	442
28	1790	2130	1500	3530	920	3000	7850	1650	453	387	432	447
29	1560	2040	1400	3310	---	2740	8010	1460	437	561	427	447
30	1520	1850	1400	2830	---	2660	7350	1370	422	619	432	437
31	1450	---	1400	2450	---	2350	---	1560	---	619	442	---
TOTAL	121620	69120	60780	80240	34310	38650	142990	124170	31329	10686	15081	17651
MEAN	3923	2304	1961	2588	1225	1247	4766	4005	1044	345	486	588
MAX	8470	4100	3410	6750	2170	3000	8010	8010	1570	619	806	1740
MIN	1450	1280	1400	1260	920	780	2190	1370	422	244	342	277

CAL YR 1977 TOTAL 748912 MEAN 2052 MAX 13500 MIN 312
WTR YR 1978 TOTAL 746627 MEAN 2046 MAX 8470 MIN 244

01318500 HUDSON RIVER AT HADLEY, NY

LOCATION.--Lat 43°19'08", long 73°50'41", Saratoga County, Hydrologic Unit 02020001, on right bank at Hadley, 400 ft (122 m) downstream from outlet of Lake Luzerne, and 0.3 mi (0.5 km) upstream from Sacandaga River.

DRAINAGE AREA.--1,664 mi² (4,310 km²).

PERIOD OF RECORD.--July 1921 to current year.

REVISED RECORDS.--WSP 561: 1921-22. WSP 756: Drainage area. WSP 1432: 1931 (m).

GAGE.--Water-stage recorder. Datum of gage is 563.99 ft (171.904 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records excellent except those for winter periods, which are fair. Some diurnal fluctuation caused by power-plant on Schroon River. Flow regulated by Indian Lake (see station 01314500) and other reservoirs above station.

AVERAGE DISCHARGE.--57 years, 2,910 ft³/s (82.41 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 42,700 ft³/s (1,210 m³/s) Jan. 1, 1949, gage height, 21.21 ft (6.465 m); minimum, 281 ft³/s (7.96 m³/s) Sept. 3, 1934, gage height, 0.94 ft (0.287 m); minimum daily, 292 ft³/s (8.27 m³/s) July 24, 1934.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 15,000 ft³/s (420 m³/s):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Apr. 14	0600	15,200	430	9.92	3.024

Minimum discharge, 432 ft³/s (12.2 m³/s) July 27, Sept. 8, 9, gage height, 1.44 ft (0.439 m); minimum daily, 440 ft³/s (12.5 m³/s) Sept. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5880	3010	3780	2550	4640	1700	5890	11400	2900	835	1010	618
2	10700	2860	5040	2530	4310	1600	6470	9330	2880	763	908	578
3	10500	2710	5650	2440	3840	1600	6770	8100	2950	708	818	539
4	9080	2610	5230	2400	3530	1500	6360	7190	2870	662	832	513
5	7500	2840	4730	2450	3240	1500	6300	6720	2580	622	1180	495
6	6470	3380	4310	2370	3000	1500	6760	6700	2520	591	1100	474
7	5600	3670	4000	2270	2900	1500	7190	6830	2480	561	966	459
8	4850	3640	3700	2240	2900	1500	7010	7040	3020	539	872	440
9	5590	4580	3300	6170	2800	1500	6750	8240	3030	518	826	484
10	8100	4760	2900	11400	2700	1560	6350	11300	2960	504	766	546
11	8050	5610	2600	10700	2600	1570	6680	11400	2690	507	695	592
12	7270	6710	2400	9740	2500	1560	9260	9440	2440	506	698	988
13	6250	6250	2690	8760	2400	1640	11800	8130	2180	486	836	2050
14	4950	5530	3120	7730	2400	1650	14900	7880	2020	469	978	2020
15	6300	4940	3820	7000	2300	2190	13700	7790	1930	483	914	1620
16	6300	4510	4130	6400	2200	2450	11900	8310	1850	534	801	1380
17	9380	4310	4210	6000	2200	2550	10700	9390	1760	662	726	1300
18	13900	4440	3790	5600	2100	2390	10100	9150	1670	945	664	1220
19	12700	4560	3620	5400	2000	2200	10700	8400	1600	904	620	1170
20	10800	4220	3410	5200	2000	2200	11300	7470	1710	752	584	1100
21	8970	3980	3100	4800	1900	2090	12000	6940	1630	660	555	1030
22	7850	3950	3170	4600	1800	2460	11500	6980	1650	600	546	975
23	6890	4040	3180	4300	1800	2860	11600	6340	1500	563	529	941
24	6190	4050	3090	4000	1800	3100	11800	5490	1340	527	521	972
25	5550	4130	3260	3740	1800	2990	12000	4850	1190	492	600	736
26	5010	4250	3650	4220	1800	2780	12400	4390	1090	460	637	752
27	4600	4130	3000	6110	1800	3450	12900	3970	1020	463	649	737
28	4230	3800	2800	6350	1800	6480	13400	3560	984	634	636	710
29	3600	3670	2700	6190	---	6840	13600	3180	950	748	632	684
30	3430	3440	2700	5720	---	6340	13000	2890	898	972	613	665
31	3220	---	2600	5150	---	6030	---	2830	---	1000	615	---
TOTAL	219710	124580	109680	164540	71060	81280	301090	221630	60297	19720	23327	26788
MEAN	7087	4153	3538	5308	2538	2622	10040	7149	2010	636	752	893
MAX	13900	6710	5650	11400	4640	6340	14900	11400	3030	1000	1180	2050
MIN	3220	2610	2400	2240	1800	1500	5890	2830	898	460	521	440

CAL YR 1977 TOTAL 1371690 MEAN 3758 MAX 23500 MIN 493
WTR YR 1978 TOTAL 1423702 MEAN 3901 MAX 14900 MIN 440

01319000 EAST BRANCH SACANDAGA RIVER AT GRIFFIN, NY

LOCATION.--Lat 43°28'25", long 74°13'25", Hamilton County, Hydrologic Unit 02020002, on left bank 300 ft (91 m) upstream from bridge on jeep trail, 0.3 mi (0.5 km) from State Highway 8, at Griffin, 2.0 mi (3.2 km) downstream from Georgia Creek, 3 mi (5 km) upstream from mouth, and 7 mi (11 km) upstream from Wells.

DRAINAGE AREA.--114 mi^2 (295 km^2).

PERIOD OF RECORD.--August 1933 to May 1978 (discontinued).

REVISED RECORDS.--WSP 1111: 1936(M).

GAGE.--Water-stage recorder. Datum of gage is 1,254.32 ft (382.317 m) National Geodetic Vertical Datum of 1929. Prior to June 19, 1959, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods, which are poor.

AVERAGE DISCHARGE.--44 years (1933-77), 216 ft^3/s (6.117 m^3/s), 25.73 in/yr (654 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,700 ft^3/s (303 m^3/s) Dec. 31, 1948, gage height, 14.35 ft (4.374 m), from floodmarks, from rating curve extended above 4,400 ft^3/s (125 m^3/s) on basis of slope-area and contracted-opening measurements of peak flow; minimum observed, 2.4 ft^3/s (0.068 m^3/s) Sept. 20, 1939, gage height, 0.30 ft (0.091 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,700 ft^3/s (76 m^3/s) and maximum (*) during period October 1977 to May 1978:

Date	Time	Discharge		Gage height	
		(ft^3/s)	(m^3/s)	(ft)	(m)
Oct. 2	0300	*2,970	84.1	*8.24	2.512
Oct. 17	1830	2,910	82.4	8.18	2.493

Minimum daily discharge, 42 ft^3/s (1.19 m^3/s) Mar. 7, 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	537	107	334	110	260	48	350	725				
2	2070	103	569	110	240	47	370	540				
3	940	99	430	100	220	46	350	495				
4	565	103	300	100	200	45	340	501				
5	379	161	230	96	180	44	330	515				
6	276	214	190	96	160	43	330	498				
7	213	218	160	94	150	42	310	525				
8	175	296	150	94	140	42	300	550				
9	769	854	150	350	130	43	310	1020				
10	1130	569	170	1300	120	43	360	1120				
11	638	659	160	500	110	45	450	713				
12	452	528	150	300	100	47	900	540				
13	346	391	150	230	96	52	1400	443				
14	274	303	160	200	90	64	1870	386				
15	454	246	170	190	84	100	1020	386				
16	601	224	170	180	80	130	717	460				
17	1690	246	160	180	76	140	667	841				
18	1670	356	140	170	72	130	729	674				
19	850	327	120	170	70	110	963	559				
20	556	265	120	170	68	110	1000	432				
21	405	236	130	170	64	110	1110	413				
22	322	259	130	170	62	140	940	353				
23	274	240	130	170	60	140	1110	285				
24	232	298	130	170	58	160	1210	238				
25	203	327	160	180	56	150	1330	202				
26	182	270	160	230	54	140	1290	167				
27	164	240	150	350	52	300	1450	139				
28	148	210	140	700	49	1200	1480	116				
29	132	170	130	540	---	1100	1380	101				
30	124	150	120	430	---	500	1120	106				
31	115	---	120	300	---	370	---	86				
TOTAL	16886	8669	5683	8150	3101	5681	25486	14130	---	---	---	---
MEAN	545	289	183	263	111	183	850	456	---	---	---	---
MAX	2070	854	569	1300	260	1200	1870	1120	---	---	---	---
MIN	115	99	120	94	49	42	300	86	---	---	---	---
CFSM	4.78	2.54	1.61	2.31	.97	1.61	7.46	4.00	---	---	---	---
IN.	5.51	2.83	1.85	2.66	1.01	1.85	8.32	4.61	---	---	---	---

CAL YR 1977 TOTAL 104359.6 MEAN 286 MAX 5680 MIN 7.8 CFSM 2.51 IN 34.05

01321000 SACANDAGA RIVER NEAR HOPE, NY

LOCATION.--Lat 43°21'10", long 74°16'15", Hamilton County, Hydrologic Unit 02020002, on left bank 1.5 mi (2.4 km) downstream from West Branch Sacandaga River, on State Highway 30, and 4.5 mi (7.2 km) upstream from Hope.

DRAINAGE AREA.--491 mi^2 (1,272 km^2).

PERIOD OF RECORD.--September 1911 to current year.

GAGE.--Water-stage recorder. Datum of gage is 881.31 ft (268.623 m) National Geodetic Vertical Datum of 1929. Prior to July 24, 1929, nonrecording gage at site 300 ft (91 m) upstream at same datum.

REMARKS.--Records good except those for winter periods, which are poor. Some seasonal regulation at Piseco Lake Outlet and, since 1959, intermittent regulation by Lake Algonquin at Wells 4 mi (6 km) upstream. Infrequent minor fluctuations by mill upstream.

AVERAGE DISCHARGE.--67 years, 1,102 ft^3/s (31.21 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 32,000 ft^3/s (906 m^3/s) Mar. 27, 1913, gage height, 11.0 ft (3.35 m), from floodmarks at site then in use; minimum, about 16 ft^3/s (0.45 m^3/s) Sept. 30, 1913, gage height, 1.17 ft (0.357 m); minimum daily, 18 ft^3/s (0.51 m^3/s) Sept. 20, 1913.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 9,100 ft^3/s (258 m^3/s):

Date	Time	Discharge (ft^3/s)	(m^3/s)	Gage height (ft)	(m)
Oct. 2	0230	9,130	259	6.56	1.999

Minimum discharge, 33 ft^3/s (0.93 m^3/s) Sept. 10, gage height, 1.21 ft (0.369 m); minimum daily, 34 ft^3/s (0.96 m^3/s) Sept. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2550	647	1600	960	1100	380	1970	3920	488	157	228	75
2	6950	606	2550	900	1000	370	2370	2830	388	139	213	64
3	3810	582	2150	860	940	360	2180	2890	554	126	186	58
4	2620	582	1850	840	920	350	1960	2680	573	119	273	54
5	2420	689	1400	820	900	350	2080	2570	504	110	248	49
6	1760	795	1200	800	860	340	2120	2410	475	102	201	47
7	1460	851	1100	800	820	340	2240	2380	469	95	181	44
8	1300	1220	1000	900	780	340	2160	2410	1230	87	174	40
9	2820	2860	940	4500	740	340	1990	3500	1210	83	206	36
10	4350	2130	900	4950	700	340	1980	4240	1060	79	213	34
11	2860	2600	880	3040	680	340	2350	3330	836	74	190	244
12	2290	2360	900	2500	660	350	4400	2750	681	68	206	1020
13	2070	1940	940	2100	640	360	5700	2460	489	62	305	759
14	1720	1700	1100	1800	620	400	6690	2210	448	59	270	552
15	2260	1240	1600	1500	600	490	4390	2120	434	67	243	487
16	2600	1130	1600	1300	580	860	3540	2130	370	107	222	447
17	5180	1230	1500	1100	560	680	3450	2710	281	153	205	384
18	5130	1510	1300	1000	540	600	3460	2520	265	146	187	324
19	3340	1490	1200	960	520	540	4180	2130	278	139	173	355
20	2670	1310	1100	900	500	520	4330	1860	274	77	167	349
21	2160	1220	1000	860	490	520	4710	1740	260	84	158	312
22	1860	1410	940	860	480	680	4070	1580	566	76	146	290
23	1630	1360	880	860	460	1100	4550	1200	479	69	133	254
24	1410	1570	880	880	450	780	4860	1140	383	68	96	225
25	1250	1660	1200	900	430	720	5420	1030	312	64	93	198
26	939	1700	1400	1600	410	680	5460	905	260	60	108	178
27	950	1400	1300	2780	400	1300	5790	800	235	61	95	160
28	890	1200	1100	2310	390	3300	5870	706	225	250	84	152
29	804	1100	1100	1800	---	2920	5670	630	181	241	88	144
30	741	1100	1000	1400	---	2260	5090	597	172	247	88	137
31	689	---	960	1200	---	1920	---	548	---	233	84	---
TOTAL	73483	41192	38570	47980	18170	24830	115030	64926	14380	3502	5464	7472
MEAN	2370	1373	1244	1548	649	801	3834	2094	479	113	176	249
MAX	6950	2860	2550	4950	1100	3300	6690	4240	1230	250	305	1020
MIN	689	582	880	800	390	340	1960	548	172	59	84	34

CAL YR 1977 TOTAL 503369 MEAN 1379 MAX 17100 MIN 82
WTR YR 1978 TOTAL 454999 MEAN 1247 MAX 6950 MIN 34

01323500 GREAT SACANDAGA LAKE AT CONKLINGVILLE, NY

LOCATION.--Lat 43°18'57", long 73°55'39", Saratoga County, Hydrologic Unit 02020002, 800 ft (244 m) upstream from right end of Conklingville Dam on Sacandaga River at Conklingville.

DRAINAGE AREA.--1,044 mi^2 (2,704 km^2).

PERIOD OF RECORD.--January 1930 to current year. Prior to October 1969, published as "Sacandaga Reservoir at Conklingville."

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum, adjustment of 1912. Prior to Apr. 23, 1930, nonrecording gage at same datum in outlet channel 800 ft (244 m) downstream.

REMARKS.--Reservoir is formed by earth and concrete dam; storage began in March 1930; dam completed in 1930. Usable capacity for stream regulation, 29,670 mil ft^3 (840.3 hm^3) between elevations 735.0 ft (224.03 m) and 768.0 ft (234.09 m). Between elevations 768.0 ft (234.09 m) and 771.0 ft (235.00 m) (spillway crest) an additional 3,450 mil ft^3 (97.7 hm^3) is available exclusively for flood storage. Elevation of inverts of three Dow valves is 699.0 ft (213.06 m). Capacity of 4,600 mil ft^3 (130 hm^3) below elevation 735.0 ft (224.03 m) is considered dead storage, except for extraordinary emergencies or for necessary inspection of structures. Purpose of reservoir is to provide flood control and low-water stream regulation for sanitary improvement, navigation, and power, as required by the public welfare, including public health and saftey. Area of water surface of reservoir filled to capacity, elevation, 771.0 ft (235.00 m), is 41.7 mi^2 (108 km^2).

COOPERATION.--Records furnished by Board of Hudson River-Black River Regulating District.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 770.78 ft (234.934 m) June 26, 1972, contents, 37,470 mil ft^3 (1,061 hm^3); minimum since first filling, 729.55 ft (222.367 m) Mar. 30, 1940, contents, 2,100 mil ft^3 (59.5 hm^3).

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 767.83 ft (234.050 m) May 22, contents, 34,100 mil ft^3 (965.7 hm^3); minimum, 738.30 ft (225.034 m) Mar. 25, contents, 6,630 mil ft^3 (189.8 hm^3).

Capacity table, current water year
(elevation, in feet, and contents, in billions of cubic feet)

738	6.43	760	25.61
740	7.80	764	29.85
745	11.64	768	34.27
750	15.94	771	37.72
755	20.16		

ELEVATION, IN FEET ABOVE MEAN SEA LEVEL, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	757.80	763.05	762.02	757.86	753.50	745.02	743.20	764.36	767.03	764.55	761.06	756.96
2	758.77	762.80	762.33	757.61	753.25	744.65	743.95	764.68	766.90	764.47	760.92	756.78
3	759.56	762.56	762.60	757.31	752.98	744.27	744.59	765.00	766.87	764.39	760.80	756.70
4	759.88	762.33	762.97	757.00	752.69	743.90	745.13	765.28	766.80	764.30	760.70	756.72
5	760.02	762.10	763.05	756.68	752.38	743.75	745.71	765.58	766.81	764.27	760.55	756.62
6	760.15	762.06	763.06	756.36	752.07	743.68	746.32	765.86	766.65	764.12	760.48	756.47
7	760.14	762.06	762.99	756.05	751.78	743.27	746.93	766.12	766.51	763.98	760.43	756.23
8	760.15	761.94	762.76	755.74	751.48	742.85	747.54	766.38	766.60	763.82	760.36	756.01
9	760.43	762.10	762.55	755.82	751.17	742.42	748.05	766.74	766.70	763.71	760.24	755.80
10	761.17	762.22	762.29	756.46	750.83	741.98	748.53	767.22	766.71	763.66	760.07	755.68
11	761.56	762.34	761.97	756.72	750.51	741.54	749.07	767.38	766.74	763.46	759.90	755.70
12	761.80	762.36	761.63	756.76	750.18	741.37	749.92	767.49	766.77	763.29	759.80	755.72
13	761.88	762.48	761.35	756.68	749.83	741.30	751.05	767.48	766.70	763.12	759.80	755.68
14	761.88	762.64	761.14	756.60	749.52	740.89	752.44	767.43	766.55	762.97	759.73	755.59
15	762.05	762.58	761.06	756.48	749.22	740.58	753.46	767.35	766.37	762.83	759.58	755.48
16	762.27	762.43	761.02	756.29	748.91	740.25	754.12	767.33	766.17	762.75	759.45	755.33
17	762.82	762.28	760.91	756.03	748.60	739.83	754.72	767.46	766.02	762.75	759.30	755.26
18	763.67	762.26	760.84	755.83	748.31	739.57	755.28	767.58	765.97	762.65	759.10	755.20
19	764.05	762.16	760.85	755.58	747.98	739.58	755.93	767.65	765.96	762.50	758.92	755.10
20	764.29	762.16	760.63	755.32	747.66	739.58	756.73	767.60	765.82	762.35	758.82	755.00
21	764.45	762.27	760.45	755.10	747.32	739.22	757.60	767.70	765.60	762.18	758.73	754.88
22	764.49	762.19	760.27	754.82	746.98	738.94	758.30	767.83	765.63	762.03	758.56	754.73
23	764.38	762.08	760.02	754.54	746.63	738.77	758.97	767.75	765.52	762.00	758.38	754.57
24	764.23	762.02	759.75	754.23	746.28	738.62	759.66	767.65	765.35	761.87	758.20	754.52
25	764.08	761.94	759.54	753.94	745.90	738.41	760.37	767.53	765.27	761.70	758.00	754.43
26	763.92	762.00	759.40	753.80	745.80	738.50	761.08	767.47	765.22	761.53	757.86	754.24
27	763.73	762.03	759.20	753.93	745.77	738.97	761.80	767.33	765.10	761.46	757.76	754.06
28	763.54	762.02	758.95	754.04	745.40	740.02	762.53	767.25	765.01	761.40	757.68	753.87
29	763.31	762.00	758.68	754.02	---	741.16	763.23	767.33	764.97	761.27	757.55	753.68
30	763.26	761.95	758.40	753.90	---	741.95	765.85	767.30	764.73	761.18	757.34	753.50
31	763.27	---	758.13	753.70	---	742.58	---	767.17	---	761.15	757.16	---
MEAN	762.16	762.25	760.99	755.65	749.39	741.21	753.40	766.91	766.10	762.83	759.27	755.35
MAX	764.49	763.05	763.06	757.86	753.50	745.02	765.85	767.83	767.03	764.55	761.06	756.96
MIN	757.80	761.94	758.13	753.70	745.40	738.41	743.20	764.36	764.73	761.15	757.16	753.50
†	28.88	27.65	23.57	19.27	11.81	9.92	29.98	33.26	30.53	26.76	22.64	19.09
‡	+2095	-475	-1523	-1605	-3084	-706	+7739	+1225	-1053	-1408	-1538	-1370

CAL YR 1977 MEAN 758.62 MAX 770.57 MIN 738.78 ‡ +178
WTR YR 1978 MEAN 758.02 MAX 767.83 MIN 738.41 ‡ -133

† Contents, in billions of cubic feet, at 2400 hours on last day of month.
‡ Change in contents, equivalent in cubic feet per second.

01325000 SACANDAGA RIVER AT STEWARTS BRIDGE, NEAR HADLEY, NY

LOCATION.--Lat 43°18'41", long 73°52'04", Saratoga County, Hydrologic Unit 02020002, on left bank 1.0 mi (1.6 km) downstream from Stewarts Bridge, 1.1 mi (1.8 km) west of Hadley, 1.4 mi (2.3 km) upstream from mouth, and 1.5 mi (2.4 km) downstream from Stewarts Bridge hydroelectric plant.

DRAINAGE AREA.--1,055 mi^2 (2,732 km^2).

PERIOD OF RECORD.--September 1907 to current year. Published as "near Hadley" 1907-1910, "at Hadley" 1911-32 and "at Conklingville" 1932-52. Records published for both sites October 1951 to September 1952.

REVISED RECORDS.--WSP 1302: 1908. WSP 1432: 1910-12, 1916-21.

GAGE.--Water-stage recorder. Datum of gage is 582.00 ft (177.394 m) National Geodetic Vertical Datum of 1929. Prior to Jan. 1, 1911, nonrecording gage at site about 1 mi (2 km) upstream at different datum. Jan. 1, 1911 to Sept. 30, 1932, water-stage recorder at site 0.8 mi (1.3 km) downstream at datum 8.82 ft (2.688 m) lower than present datum. Oct. 1, 1932 to Sept. 30, 1952, water-stage recorder at site 3.6 mi (5.8 km) upstream at datum 85.47 ft (26.051 m) higher than present datum.

REMARKS.--Records good above 10 ft^3/s (0.28 m^3/s) and fair below. Flow regulated by Great Sacandaga Lake since Mar. 27, 1930 (see station 01323500); no discharge over spillway during year. Extensive diurnal fluctuation caused by release of water from Great Sacandaga Lake, through Elmer J. West hydroelectric station as directed by Board of Hudson River-Black River Regulating District, and through Stewarts Bridge hydroelectric station.

COOPERATION.--Since Oct. 1, 1932, discharge computed by Board of Hudson River-Black River Regulating District from rating developed by Geological Survey.

AVERAGE DISCHARGE.--71 years, 2,144 ft^3/s (60.72 m^3/s), adjusted for storage since 1930.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 35,500 ft^3/s (1,010 m^3/s) Mar. 28, 1913, gage height, 12.36 ft (3.767 m) site and datum then in use; minimum, 5.3 ft^3/s (0.15 m^3/s) Mar. 17, 18, 1964, Apr. 29 to May 4, May 5, 6, 1965; minimum daily, 5.3 ft^3/s (0.15 m^3/s) Apr. 30 to May 3, 1965. Maximum discharge since construction of Conklingville Dam in 1930, 13,300 ft^3/s (377 m^3/s) July 1, 1968, gage height, 9.54 ft (2.908 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,770 ft^3/s (163 m^3/s) Dec. 8, 19, Jan. 9, 18, 20, Feb. 6, gage height, 6.15 ft (1.875 m); minimum daily, 11 ft^3/s (0.31 m^3/s) Apr. 9-11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2060	4140	2660	5080	4920	4280	13	22	2550	2060	2060	2300
2	35	4150	2570	5150	4930	4280	14	20	2450	46	2130	2250
3	2050	4120	30	5050	4880	4360	12	15	2600	2020	2120	55
4	2030	4140	26	4740	4930	4360	12	20	616	54	2140	25
5	2020	4130	3020	4970	4880	157	12	1060	2550	2020	2130	2180
6	2040	121	4120	5050	4940	3130	12	21	2500	2020	123	2330
7	2080	2980	4140	5090	4790	4350	12	21	2560	2040	2050	2310
8	1980	4110	5040	4960	4860	4410	12	21	2530	2110	2130	2290
9	41	4080	5350	5290	4820	4460	11	23	2540	92	2040	2300
10	2000	4130	5240	5130	4840	4530	11	1190	2560	2400	2330	53
11	1990	4170	5310	5060	4760	4370	11	2960	47	2070	1890	2330
12	2030	4190	5310	5040	4780	161	15	3080	2550	2040	2050	2270
13	2940	176	5190	5070	4780	3080	15	4100	2610	2060	41	2260
14	2630	2940	5280	5080	4220	4330	15	4200	2580	2010	2200	2330
15	2380	3150	5290	5090	4220	4300	13	4180	2580	2000	2190	2400
16	126	4090	5250	4990	4210	4300	12	4140	2610	54	2220	2310
17	2580	4100	5360	5080	4190	4310	12	4160	2530	2080	2160	56
18	2910	4090	1840	5090	4160	4310	13	4150	45	2040	2190	2250
19	2850	4110	4900	4990	4170	106	13	4140	2560	2070	2190	2290
20	2560	149	5120	5000	4200	3020	16	4110	2580	2150	43	2290
21	2520	2970	5260	4990	4200	4190	15	160	2570	2110	2200	2280
22	2890	4170	5070	5000	4200	4170	13	2950	2730	2110	2270	2300
23	4100	4130	5060	4980	4200	4130	12	3120	2640	59	2200	2320
24	4090	4130	5170	4980	4230	4150	19	3110	2480	2050	2190	57
25	4120	4120	5200	4910	4200	3950	21	3020	44	2060	2200	2240
26	4130	4150	5260	5060	150	159	25	3060	2050	2100	2220	2280
27	4130	2210	5170	5010	3010	3100	22	3050	1980	2160	49	2260
28	4170	2590	5120	4940	4250	1140	22	106	2120	2130	2170	2200
29	4170	2520	5160	5040	---	14	23	24	2110	2120	2230	2240
30	137	2650	5100	4930	---	12	23	2990	2000	52	2240	2170
31	2950	---	5110	4930	---	12	---	2700	---	2080	2240	---
TOTAL	76739	100906	137726	155600	120920	95631	451	65925	64872	52467	58636	57226
MEAN	2475	3364	4443	5026	4319	3085	15.0	2127	2162	1692	1891	1908
MAX	4170	4190	5360	5290	4940	4530	25	4200	2730	2400	2330	2400
MIN	35	121	26	4740	150	12	11	15	44	46	41	25

Adjusted for change in contents in Great Sacandaga Lake and Stewarts Bridge Pool

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	4571	2890	2919	3420	1234	2289	7817	3382	1112	281	354	542
CFSM	4.33	2.74	2.77	3.24	1.17	2.17	7.41	3.21	1.05	.27	.34	.51
IN.	5.00	3.06	3.19	3.74	1.22	2.50	8.27	3.70	1.18	.31	.39	.57

	Observed								Adjusted					
CAL YR 1977	TOTAL	933479.4	MEAN	2557	MAX	10800	MIN	8.2	MEAN	2735	CFSM	2.59	IN	35.18
WTR YR 1978	TOTAL	987299.0	MEAN	2705	MAX	5360	MIN	11	MEAN	2573	CFSM	2.44	IN	33.10

01327500 GLENS FALLS FEEDER AT DUNHAM BASIN, NY

LOCATION.--Lat 43°18'15", long 73°32'49", Washington County, Hydrologic Unit 02020003, on left bank at Dunham Basin, 100 ft (30 m) upstream from Bond Creek, 2.0 mi (3.2 km) east of courthouse at Hudson Falls, and 8.0 mi (12.9 km) downstream from Hudson River feeder dam at Glens Falls.

PERIOD OF RECORD.--September 1945 to current year (navigation seasons only).

GAGE.--Water-stage recorder. Datum of gage is 139.88 ft (42.635 m) Barge Canal datum.

REMARKS.--Records fair. Feeder flow during navigation season is net diversion from Hudson River basin to the summit level of the Champlain (Barge) Canal, 0.4 mi (0.6 km) downstream, and is diverted in accordance with requirements of the canal. Flow during remainder of year consists of leakage through headgates and inflow from area tributary to feeder above station, which may continue during period of nonoperation. During navigation season a portion of the flow is rediverted into Lake Champlain basin; the remainder returns to the Hudson River in southbound lockages.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	201	131	279				---	82	47	51	118	73
2	259	133	154				---	78	61	45	123	70
3	177	114	127				---	75	77	70	212	73
4	159	99	112				---	71	63	58	196	65
5	142	98	112				---	70	53	71	70	73
6	136	91	82				---	71	55	60	82	66
7	131	87	88				---	70	61	86	75	71
8	122	122	18				---	70	80	70	70	70
9	458	122	7.1				---	77	66	50	71	68
10	198	114	14				---	77	60	65	71	84
11	159	118	8.8				---	78	54	63	66	98
12	136	116	6.7				---	78	47	51	88	102
13	133	112	7.1				---	78	55	50	82	80
14	167	118	26				109	75	51	66	78	94
15	172	122	40				109	80	50	68	70	102
16	185	124	---				106	78	53	48	68	96
17	453	167	---				106	86	51	63	70	82
18	136	145	---				92	86	47	65	71	80
19	110	120	---				88	80	42	71	71	82
20	103	105	---				92	77	48	58	80	78
21	96	98	---				94	71	63	77	77	90
22	89	122	---				90	68	173	70	68	90
23	89	140	---				88	68	70	36	70	84
24	107	127	---				88	66	63	82	70	88
25	157	129	---				88	65	60	106	65	78
26	152	330	---				88	65	53	109	58	77
27	152	136	---				88	60	60	134	71	82
28	154	126	---				92	55	57	157	66	80
29	152	116	---				86	58	55	123	61	86
30	127	112	---				82	78	53	118	70	88
31	99	---	---				---	92	---	123	70	---
TOTAL	5111	3794	---	---	---	---	---	2283	1828	2364	2578	2450
MEAN	165	126	---	---	---	---	---	73.6	60.9	76.3	83.2	81.7
MAX	458	330	---	---	---	---	---	92	173	157	212	102
MIN	89	87	---	---	---	---	---	55	42	36	58	65

01327600 HUDSON RIVER AT GLENS FALLS, NY

LOCATION.--Lat 43°18'20", long 73°36'58", at Warren-Saratoga County line, Hydrologic Unit 02020003, at road and quarry conveyor bridge, 0.1 mi (0.2 km) east of Glens Falls, 1.4 mi (2.3 km) downstream from bridge on U.S. Highway 9-State Highway 32, and 4.3 mi (6.9 km) upstream from discharge station (01327750, Hudson River at Fort Edward).

DRAINAGE AREA.--2,810 mi^2 (7,278 km^2).

PERIOD OF RECORD.--Water years 1972 to 1975, 1977 to current year.
CHEMICAL DATA: 1972 (c), 1973-74 (d), 1975 (c).
MINOR ELEMENTS DATA: 1972 (a), 1973-75 (c), 1977-78 (d).
PESTICIDE DATA: 1977-78 (d).
ORGANIC DATA: TOC--1974 (a), 1975 (c).
PCB--1977-78 (d).
PCN--1977-78 (d).
NUTRIENT DATA: 1972 (c), 1973-74 (d), 1975 (c), 1977-78 (d).
SEDIMENT DATA: 1975 (a), 1977 (c), 1978 (e).

PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT DISCHARGE: April to September 1977.

REMARKS.--Water-discharge records for Hudson River at Fort Edward (station 01327750) are used to compute sediment discharges.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	SOLIDS, VOLA-TILE, SUS-PENDED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)
NOV									
09...	0900	8120	4	1	.14	.62	.76	.02	180
DEC									
14...	0900	7980	8	4	.18	.32	.50	.03	180
MAR									
15...	1100	4490	1	0	.31	.60	.91	.01	200
APR									
14...	1230	15900	8	5	.48	.39	.87	.01	370
MAY									
09...	1400	7320	4	0	.38	.38	.76	.01	160
JUN									
01...	0815	4090	3	2	.26	.72	.98	.01	180
JUL									
05...	1230	2470	0	0	.89	--	--	.01	150
25...	1100	2550	13	--	.21	.86	1.1	.02	150
AUG									
14...	1300	3390	3	3	.81	.47	1.3	.01	160
SEP									
01...	0800	2350	3	1	.18	.40	.58	.01	110

DATE	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	PCB, TOTAL (UG/L)	NAPH-THA-LENES, POLY-CHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR-DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)
NOV									
09...	0	20	.0	.00	.00	.0	.00	.00	.00
DEC									
14...	19	10	.0	.00	.00	.0	.00	.00	.00
MAR									
15...	10	30	.0	.00	.00	.0	.00	.00	.00
APR									
14...	11	30	.0	.00	.00	.0	.00	.00	.00
MAY									
09...	6	20	.0	.00	.00	.0	.00	.00	.00
JUN									
01...	1	40	.0	.00	.00	.0	.00	.00	.00
JUL									
05...	5	30	.0	.00	.00	.0	.00	.00	.00
25...	16	30	.0	.00	.00	.0	.00	.00	.00
AUG									
14...	9	40	.0	.00	.00	.0	.00	.00	.00
SEP									
01...	5	20	.0	.00	.00	.0	.00	.00	.00

01327600 HUDSON RIVER AT GLENS FALLS, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	DI-ELDRIN TOTAL (UG/L)	ENDO-SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	HEPTA-CHLOR, TOTAL (UG/L)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	MIREX, TOTAL (UG/L)	TOX-APHENE, TOTAL (UG/L)
NOV								
09...	.00	--	.00	.00	.00	.00	.00	0
DEC								
14...	.00	--	.00	.00	.00	.00	.00	0
MAR								
15...	.00	--	.00	.00	.00	.00	.00	0
APR								
14...	.00	--	.00	.00	.00	.00	.00	0
MAY								
09...	.00	--	.00	.00	.00	.00	.00	0
JUN								
01...	.00	.00	.00	.00	.00	.00	.00	0
JUL								
05...	.00	.00	.00	.00	.00	.00	.00	0
25...	.00	.00	.00	.00	.00	.00	.00	0
AUG								
14...	.00	.00	.00	.00	.00	.00	.00	0
SEP								
01...	.00	.00	.00	.00	.00	.00	.00	0

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
NOV				
09...	0900	8120	3	66
10...	0830	8960	5	121
11...	1030	8910	5	120
14...	1430	5890	5	80
15...	1100	6650	42	754
16...	1030	8160	7	154
18...	1215	8160	3	66
19...	1300	8030	2	43
20...	1200	5550	4	60
21...	1630	4490	4	48
22...	2230	7630	3	62
23...	2000	8120	1	22
24...	0900	7720	3	63
28...	2300	7320	8	158
29...	2000	6530	3	53
30...	1730	5660	22	336
DEC				
08...	2100	9150	116	2870
11...	1400	7980	9	194
13...	2200	10200	9	248
14...	0900	7980	3	65
14...	1800	8120	125	2740
DEC				
19...	1630	5590	97	1460
20...	1600	7890	4	85
21...	2000	8580	46	1070
23...	1400	7500	11	223
24...	1800	7850	3	64
25...	0600	7450	12	241
26...	1030	8630	21	489
27...	1800	7630	15	309
28...	1800	7500	39	790
MAR				
15...	1100	4490	8	97
APR				
06...	1345	6450	6	104
10...	1300	5860	18	285
14...	1230	15900	11	472
16...	1230	12900	66	2300
17...	1200	10700	6	173
17...	1830	10200	4	110
22...	1200	12100	3	98
24...	1800	11900	4	129
MAY				
06...	1200	6290	5	85
09...	1400	7320	6	119
16...	1400	12300	7	232
25...	1230	6860	2	37
JUN				
01...	0815	4090	2	22
JUL				
05...	1230	2470	4	27
JUL				
08...	1345	2600	6	42
24...	1220	2880	4	31
29...	1100	2780	5	38
AUG				
14...	1300	3390	2	18
SEP				
01...	0800	2350	25	159

01327750 HUDSON RIVER AT FORT EDWARD, NY

LOCATION.--Lat 43°16'10", long 73°35'47", Washington County, Hydrologic Unit 02020003, on left bank 40 ft (12 m) upstream from Scott Paper Mill, 150 ft (46 m) south of River Street in Fort Edward, and 0.4 mi (0.6 km) upstream from bridge on State Highway 197.

DRAINAGE AREA.--2,817 mi^2 (7,296 km^2).

PERIOD OF RECORD.--December 1976 to current year.

GAGE.--Water-stage recorder. Datum of gage is 100.00 ft (30.480 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair. Flow regulated appreciably by Great Sacandaga Lake (see station 01323500) and Indian Lake (see station 01314500). Diurnal fluctuation caused by powerplants upstream from station. Water is diverted into (St. Lawrence River basin through Glens Falls feeder (see station 01327500), Bond Creek (see station 01328000), and Champlain (Barge) Canal, and occasionally may be received from that basin through summit level of Champlain (Barge) Canal at Dunham Basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 31,000 ft^3/s (878 m^3/s) Apr. 26, 1977, gage height 27.50 ft (8.382 m); maximum gage height, 28.71 ft (8.751 m) Jan. 11, 1978, ice jam; minimum discharge, 400 ft^3/s (11.3 m^3/s) Sept. 4, 1978, gage height, 19.33 ft (5.892 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 20,200 ft^3/s (572 m^3/s) Oct. 18, gage height, 24.96 ft (7.608 m); maximum gage height, 28.71 ft (8.751 m) Jan. 11, ice jam; minimum discharge, 400 ft^3/s (11.3 m^3/s) Sept. 4, gage height, 19.33 ft (5.892 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7540	6410	6210	7540	9200	5510	6170	11800	5400	2730	3300	2450
2	10200	6810	5930	7240	9290	5890	6410	9690	5080	1210	3300	2670
3	12900	6650	7320	7720	8960	5440	6860	8300	5590	2090	3720	1400
4	11700	6530	5590	7450	8810	5370	6570	7020	4970	753	2450	652
5	9490	6610	5930	6690	8580	2800	6610	7150	3870	2160	3100	2020
6	8770	5440	7890	6770	8400	3780	6610	6860	4720	2450	1790	2160
7	8210	4120	7800	7110	8200	5180	7280	6770	5110	2620	3080	2420
8	7190	7850	8160	6770	8000	5220	6900	6730	5110	2650	3100	2400
9	6010	8160	8530	8770	7800	5590	6860	7370	5550	1040	2990	2280
10	8580	8490	8770	17400	7800	5510	6490	11000	5260	2210	3330	807
11	10500	9000	8030	17000	7600	5590	6490	14500	4250	2910	2910	1920
12	9100	10700	8120	16100	7190	3100	7850	13200	3660	2320	3080	2990
13	9100	8260	10900	13500	7070	3810	11200	12400	4590	2230	1080	3390
14	8350	6770	8720	12600	6730	5180	15100	11900	4490	2070	3020	3630
15	8070	7890	9150	11900	6090	5700	14600	11700	4320	2750	3160	3600
16	7940	8440	8910	11000	6010	6770	12700	12300	4290	1200	3240	3630
17	8860	8350	9050	9890	6050	6170	10700	13200	4030	2230	3270	1790
18	18900	8120	7500	9440	6010	6330	9990	13500	2970	3270	3050	2500
19	17900	8120	5820	9340	5970	3750	10400	12700	2910	3360	2550	3100
20	15400	6570	8070	9200	5890	3720	11000	11700	3810	2830	1010	2910
21	12700	4520	8260	9100	5660	5700	12000	8490	4160	2880	2620	2780
22	10800	7500	7980	9250	6010	5930	11700	7800	4090	2880	2990	2880
23	11300	7720	7670	8630	5780	6940	11600	9150	4030	1490	2990	2700
24	10500	7720	7720	9200	5370	6980	11700	8770	3810	1720	3050	1360
25.	9790	7850	7720	7890	5630	6860	11900	7320	2110	2280	2780	2500
26	9150	8300	8260	8390	4930	4660	12400	7540	2210	2520	2800	2450
27	8300	6690	8070	9840	3840	4520	13100	6770	3190	2620	1580	2500
28	8120	7110	8210	10700	5080	8670	13700	5400	3050	2830	2600	2970
29	7760	5780	7940	11000	---	7070	13800	3600	3020	3050	2400	2670
30	5510	5550	7410	10100	---	6610	13500	3690	2940	1560	2470	1440
31	4320	---	7320	9590	---	6210	---	5290	---	2420	2570	---
TOTAL	302960	216030	242960	307120	191950	170560	302390	283610	122590	71333	85380	72969
MEAN	9773	7268	7837	9907	6855	5502	10080	9149	4086	2301	2754	2432
MAX	18900	10700	10900	17400	9290	8670	15100	14500	5590	3360	3720	3630
MIN	4320	4120	5590	6690	3840	2800	6170	3600	2110	753	1010	652

CAL YR 1977 TOTAL 2286735 MEAN 6265 MAX 28300 MIN 690
WTR YR 1978 TOTAL 2371852 MEAN 6498 MAX 18900 MIN 652

01327755 HUDSON RIVER AT ROGERS ISLAND AT FORT EDWARD, NY

LOCATION.--Lat 43°15'52", long 73°35'28", Saratoga-Washington Counties, Hydrologic Unit 02020003, at bridges on State Highway 197 over Rogers Island in Fort Edward, 0.4 mi (0.6 km) downstream from discharge station (01327750, Hudson River at Fort Edward), and 0.6 mi (1.0 km) upstream from Champlain Canal.

DRAINAGE AREA.--2,817 mi² (7,296 km²), at gage.

PERIOD OF RECORD.--Water years 1975 to current year.
CHEMICAL DATA: 1975-76 (a).
MINOR ELEMENTS DATA: 1975 (b), 1976-77 (a), 1978 (e).
PESTICIDE DATA: 1975 (a), 1977 (a), 1978 (e).
ORGANIC DATA: TOC--1975 (a).
PCB--1975 (a), 1977 (a), 1978 (e).
PCN--1977 (a), 1978 (e).
NUTRIENT DATA: 1976-77 (a), 1978 (e).
SEDIMENT DATA: 1975 (b).

PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT DISCHARGE: March to September 1978.

REMARKS.--Water-discharge records for Hudson River at Fort Edward (station 01327750) are used to compute sediment discharges. Sediment discharge was estimated for those days where no mean daily concentration is reported.

EXTREMES FOR CURRENT YEAR.--
SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum daily mean, 36 Mg/L March 28; minimum daily mean, 1 mg/L May 4, 7, 25, July 5.
SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 843 tons (765 Mg) March 28; minimum daily 3 tons (3 Mg) estimated July 2.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)	SOLIDS, VOLATILE, SUSPENDED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	IRON, TOTAL RECOVERABLE (UG/L AS FE)
DEC									
14...	1130	7690	7	2	.21	.46	.67	.02	200
FEB									
08...	1015	--	8	0	.22	.50	.72	.01	200
MAR									
15...	0930	5150	1	0	.44	.65	1.1	.01	150
22...	0930	5440	4	1	.54	.70	1.2	.01	350
27...	1115	3160	2	0	.32	1.1	1.4	.03	210
28...	1230	8960	2	0	.42	.64	1.1	.01	200
APR									
06...	1245	5660	16	0	.52	.99	1.5	.01	160
12...	1100	7410	0	0	.59	.53	1.1	.00	160
13...	0930	11300	6	5	.33	.44	.77	.01	220
14...	1045	15800	12	3	.34	.24	.58	.01	410
14...	1530	14600	6	5	.44	.47	.91	.01	410
15...	0845	14900	10	3	.44	.22	.66	.03	410
MAY									
09...	1230	6610	3	0	.46	.51	.97	.01	330
19...	1015	13000	5	0	.32	.40	.72	.01	150
JUN									
01...	0900	4090	7	1	.40	.60	1.0	.01	180
06...	1015	3720	0	0	.50	.68	1.2	.01	210
16...	1030	3390	6	3	.40	.63	1.0	.02	210
26...	1130	2780	4	2	.62	2.1	2.7	.04	230
JUL									
05...	0930	1820	10	0	.28	.29	.57	.02	110
10...	1300	2750	8	0	.43	.73	1.2	.04	180
18...	1145	3240	6	2	.33	.91	1.2	.02	140
25...	0915	1580	5	--	.46	.92	1.4	.02	140
AUG									
04...	1430	2400	3	0	.44	1.3	1.7	.03	270
14...	1430	3450	5	1	.79	.52	1.3	.02	140
23...	0930	3360	0	0	.38	.62	1.0	.01	290
SEP									
01...	1000	2350	7	10	.39	.88	1.3	.01	140
05...	0800	2280	4	0	.87	1.9	2.8	.03	160
26...	1315	2400	2	--	.48	1.2	1.7	.02	150

01327755 HUDSON RIVER AT ROGERS ISLAND AT FORT EDWARD, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	PCB, TOTAL (UG/L)	NAPHTHALENES, POLYCHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLORDANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)
DEC									
14...	12	10	.0	.00	.00	.0	.00	.00	.00
FEB									
08...	14	20	.3	.00	.00	.0	.00	.00	.00
MAR									
15...	10	20	.0	.00	.00	.0	.00	.00	.00
22...	0	20	.0	.00	.00	.0	.00	.00	.00
27...	13	20	.2	.00	.00	.0	.00	.00	.00
28...	5	20	.0	.00	.00	.0	.00	.00	.00
APR									
06...	13	20	.0	.00	.00	.0	.00	.00	.00
12...	7	10	.1	.00	.00	.0	.00	.00	.00
13...	14	20	.1	.00	.00	.0	.00	.00	.00
14...	12	30	.0	.00	.00	.0	.00	.00	.00
14...	12	30	.0	.00	.00	.0	.00	.00	.00
15...	10	40	.0	.00	.00	.0	.00	.00	.00
MAY									
09...	38	20	.0	.00	.00	.0	.00	.00	.00
19...	1	20	.0	.00	.00	.0	.00	.00	.00
JUN									
01...	3	30	.2	.00	.00	.0	.00	.00	.00
06...	0	40	.1	.00	.00	.0	.00	.00	.00
16...	0	30	.2	.00	.00	.0	.00	.00	.00
26...	15	50	.1	.00	.00	.0	.00	.00	.00
JUL									
05...	4	20	.2	.00	.00	.0	.00	.00	.00
10...	16	40	.3	.00	.00	.0	.00	.00	.00
18...	5	30	.1	.00	.00	.0	.00	.00	.00
25...	12	40	.2	.00	.00	.0	.00	.00	.00
AUG									
04...	7	20	.1	.00	.00	.0	.00	.00	.00
14...	22	50	.3	.00	.00	.0	.00	.00	.00
23...	6	40	.2	.00	.00	.0	.00	.00	.00
SEP									
01...	10	20	.1	.00	.00	.0	.00	.00	.00
05...	12	50	.3	.00	.00	.0	.00	.00	.00
26...	8	130	.2	.00	.00	.0	.00	.00	.00

DATE	DIELDRIN TOTAL (UG/L)	ENDOSULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	HEPTACHLOR, TOTAL (UG/L)	HEPTACHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	MIREX, TOTAL (UG/L)	TOXAPHENE, TOTAL (UG/L)
DEC								
14...	.00	--	.00	.00	.00	.00	.00	0
FEB								
08...	.00	--	.00	.00	.00	.00	.00	0
MAR								
15...	.00	--	.00	.00	.00	.00	.00	0
22...	.00	--	.00	.00	.00	.00	.00	0
27...	.00	--	.00	.00	.00	.00	.00	0
28...	.00	--	.00	.00	.00	.00	.00	0
APR								
06...	.00	--	.00	.00	.00	.00	.00	0
12...	.00	--	.00	.00	.00	.00	.00	0
13...	.00	--	.00	.00	.00	.00	.00	0
14...	.00	--	.00	.00	.00	.00	.00	0
14...	.00	--	.00	.00	.00	.00	.00	0
15...	.00	--	.00	.00	.00	.00	.00	0
MAY								
09...	.00	--	.00	.00	.00	.00	.00	0
19...	.00	--	.00	.00	.00	.00	.00	0
JUN								
01...	.00	.00	.00	.00	.00	.00	.00	0
06...	.00	.00	.00	.00	.00	.00	.00	0
16...	.00	.00	.00	.00	.00	.00	.00	0
26...	.00	.00	.00	.00	.00	.00	.00	0
JUL								
05...	.00	.00	.00	.00	.00	.00	.00	0
10...	.00	.00	.00	.00	.00	.00	.00	0
18...	.00	.00	.00	.00	.00	.00	.00	0
25...	.00	.00	.00	.00	.00	.00	.00	0
AUG								
04...	.00	.00	.00	.00	.00	.00	.00	0
14...	.00	.00	.00	.00	.00	.00	.00	0
23...	.00	.00	.00	.00	.00	.00	.00	0
SEP								
01...	.00	.00	.00	.00	.00	.00	.00	0
05...	.00	.00	.00	.00	.00	.00	.00	0
26...	.00	.00	.00	.00	.00	.00	.00	0

01327755 HUDSON RIVER AT ROGERS ISLAND AT FORT EDWARD, NY--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1											---	---
2											---	---
3											---	---
4											---	---
5											---	---
6											---	---
7											---	---
8											---	---
9											---	---
10											---	---
11											---	---
12											---	---
13											---	---
14											---	---
15											6	92
16											4	73
17											2	33
18											5	85
19											8	81
20											14	141
21											6	92
22											7	112
23											21	393
24											7	132
25											18	333
26											7	88
27											5	61
28											36	843
29											30	573
30											4	71
31											3	50
TOTAL											---	3253

DAY	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	4	67	4	127	6	87	---	10	9	80	4	26
2	5	87	3	78	---	70	---	3.0	22	196	5	36
3	2	37	4	90	---	80	---	10	8	80	5	19
4	3	53	1	19	---	50	---	10	8	53	5	8.8
5	5	89	5	97	---	30	1	5.8	5	42	9	49
6	6	110	2	37	5	64	---	10	6	29	---	10
7	7	138	1	18	---	70	---	10	10	83	---	10
8	7	130	4	73	---	70	5	36	3	25	---	10
9	6	111	3	60	---	80	4	11	4	32	---	10
10	12	210	8	238	---	70	11	78	6	54	---	20
11	10	175	4	157	---	50	5	39	8	63	---	5.0
12	5	106	4	143	---	30	6	38	7	58	---	20
13	4	121	5	167	---	50	6	36	5	15	---	30
14	11	448	3	96	---	50	5	28	4	33	---	30
15	8	315	4	126	---	50	5	37	3	26	---	30
16	4	137	5	166	3	35	6	19	5	44	4	39
17	4	116	7	249	---	40	6	36	5	44	4	19
18	4	108	4	146	---	20	10	88	6	49	5	34
19	2	56	10	343	---	20	9	82	5	34	6	50
20	2	59	3	95	---	30	3	23	4	11	8	63
21	4	130	3	69	---	40	4	31	5	35	---	20
22	2	63	6	126	---	40	5	39	3	24	---	20
23	5	157	2	49	---	40	5	20	5	40	---	10
24	3	95	8	189	---	30	4	19	4	33	---	4.0
25	2	64	1	20	---	10	---	10	5	38	---	10
26	4	134	2	41	3	18	---	10	5	38	3	20
27	3	106	7	128	---	30	---	10	4	17	4	27
28	4	148	6	87	---	20	---	20	3	21	2	16
29	3	112	5	49	---	20	3	25	3	19	4	29
30	4	146	5	50	---	20	---	4.0	11	73	8	31
31	---	---	5	71	---	---	---	10	3	21	---	---
TOTAL	---	3828	---	3404	---	1314	---	807.8	---	1410	---	705.8

01328000 BOND CREEK AT DUNHAM BASIN, NY

LOCATION.--Lat 43°18'22", long 73°32'56", Washington County, Hydrologic Unit 02020003, on left bank at Dunham Basin, 800 ft (244 m) upstream from bridge on State Highway 196, 0.2 mi (0.3 km) upstream from Glens Falls feeder and abandoned Champlain Canal, 0.5 mi (0.8 km) upstream from Champlain (Barge) Canal, and 1.9 mi (3.1 km) east of courthouse at Hudson Falls.

DRAINAGE AREA.--14.7 mi² (38.1 km²).

PERIOD OF RECORD.--June 1943 to current year. Prior to October 1950, published as "Bond Brook at Dunham Basin."

GAGE.--Water-stage recorder. Datum of gage is 140.30 ft (42.763 m) Barge Canal datum.

REMARKS.--Records fair except those for winter periods, which are poor. During canal navigation season, an indeterminate portion of flow is diverted at a point 0.5 mi (0.8 km) below gage into Lake Champlain basin through summit level of Champlain (Barge) Canal at Dunham Basin.

AVERAGE DISCHARGE.--31 years, 17.8 ft³/s (0.504 m³/s), 16.44 in/yr (418 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,370 ft³/s (38.8 m³/s) Dec. 31, 1948 gage height, 8.52 ft (2.597 m); maximum gage height, 8.66 ft (2.640 m) Mar. 5, 1964 (backwater from ice); minimum discharge, 0.10 ft³/s (0.003 m³/s) Aug. 1, 2, 1965, Aug. 25, Sept. 19, 20, 1968, Sept. 12, 13, 1972.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 400 ft³/s (11 m³/s):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 9	1030	458	13.0	5.16	1.573

Minimum discharge, 1.4 ft³/s (0.040 m³/s) July 26, 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	47	6.7	129	8.0	27	7.0	56	4.1	3.2	2.9	4.5	2.1
2	133	6.7	69	7.8	24	6.6	86	3.8	6.1	2.6	3.8	2.4
3	52	6.7	42	7.6	21	6.2	56	3.8	31	2.4	40	2.1
4	40	7.2	25	7.6	20	6.0	40	3.5	20	2.4	77	2.4
5	24	8.3	21	8.2	18	5.6	70	3.5	8.8	3.2	24	1.7
6	16	7.7	18	7.6	19	5.4	60	3.2	4.1	2.9	12	2.1
7	12	7.7	15	8.0	21	5.8	50	3.2	2.6	2.6	8.3	1.9
8	9.0	24	14	9.5	22	6.0	40	3.2	29	2.4	6.7	2.1
9	165	42	14	249	18	6.8	37	8.9	11	2.6	4.9	1.9
10	117	27	15	105	20	7.3	35	13	2.6	2.4	4.5	2.1
11	48	32	16	70	25	8.0	32	7.2	2.5	1.7	3.5	11
12	36	26	18	45	21	9.0	30	5.3	2.1	1.7	27	23
13	28	22	21	32	18	10	26	4.5	2.3	1.6	22	11
14	27	21	37	20	15	16	23	4.5	2.2	1.6	7.7	4.5
15	72	16	84	16	14	27	17	6.2	2.2	1.6	4.9	3.8
16	45	18	72	14	13	20	15	12	2.5	7.7	3.8	3.2
17	177	36	55	15	12	16	14	19	2.3	7.2	3.5	3.5
18	80	62	44	17	11	14	14	18	2.2	3.2	3.2	2.4
19	44	29	36	15	10	13	12	14	2.1	2.4	2.9	2.9
20	35	22	32	14	11	13	21	9.0	4.5	2.6	3.5	2.9
21	29	21	40	15	12	15	23	6.6	16	2.1	2.1	3.8
22	23	23	72	16	10	23	16	4.9	100	1.7	1.9	2.4
23	21	19	47	16	9.3	30	11	3.7	26	2.1	1.9	2.4
24	16	29	35	20	8.6	26	8.9	2.5	14	1.7	3.2	2.6
25	14	24	74	37	8.2	22	7.7	2.0	7.2	2.4	4.5	2.4
26	13	139	27	140	7.8	20	6.7	1.8	5.3	1.7	3.2	2.1
27	11	69	20	150	7.4	40	6.2	1.7	4.9	14	2.6	3.5
28	10	35	14	100	7.4	120	5.3	1.6	6.2	31	2.4	2.1
29	8.3	30	10	70	---	70	4.5	1.7	4.9	7.7	2.4	2.6
30	7.2	26	9.0	45	---	56	4.5	2.3	3.5	5.3	2.4	2.4
31	6.7	---	8.4	31	---	56	---	2.6	---	4.1	2.6	---
TOTAL	1366.2	843.0	1133.4	1316.3	430.7	686.7	827.8	181.3	331.3	131.5	296.9	115.3
MEAN	44.1	28.1	36.6	42.5	15.4	22.2	27.6	5.85	11.0	4.24	9.58	3.84
MAX	177	139	129	249	27	120	86	19	100	31	77	23
MIN	6.7	6.7	8.4	7.6	7.4	5.4	4.5	1.6	2.1	1.6	1.9	1.7
CFSM	3.00	1.91	2.49	2.89	1.05	1.51	1.88	.40	.75	.29	.65	.26
IN.	3.46	2.13	2.87	3.33	1.09	1.74	2.09	.46	.84	.33	.75	.29

CAL YR 1977 TOTAL 10027.0 MEAN 27.5 MAX 548 MIN 1.2 CFSM 1.87 IN 25.37
WTR YR 1978 TOTAL 7660.4 MEAN 21.0 MAX 249 MIN 1.6 CFSM 1.43 IN 19.38

01329000 BATTEN KILL AT ARLINGTON, VT

LOCATION.--Lat 43°04'38", long 73°09'26", Bennington County, Hydrologic Unit 02020003, on left bank 5 ft (1.5 m) upstream from bridge on Highway 313 at Arlington and 0.9 mi (1.4 km) downstream from Warm Brook.

DRAINAGE AREA.--152 mi^2 (394 km^2).

PERIOD OF RECORD.--October 1928 to current year.

REVISED RECORDS.--WSP 756: Drainage area. WSP 851: 1936 (maximum gage height). WSP 1302: 1929-34(M).

GAGE.--Water-stage recorder. Datum of gage is 597.68 ft (182.173 m) National Geodetic Vertical Datum of 1929. Prior to Nov. 18, 1941, nonrecording gage at downstream side of bridge at same datum.

REMARKS.--Records excellent except those for winter period, which are fair. Prior to 1949, diurnal fluctuation at low flow caused by mill upstream. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--50 years, 341 ft^3/s (9.657 m^3/s), 30.47 in/yr (774 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,100 ft^3/s (314 m^3/s) Mar. 18, 1936, gage height, 11.3 ft (3.44 m), from floodmarks, present site, from rating curve extended above 6,100 ft^3/s (170 m^3/s) on basis of slope-area measurement at gage height 10.8 ft (3.29 m) and computation of peak flow over dam; minimum, 37 ft^3/s (1.05 m^3/s) Sept. 25, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,200 ft^3/s (62 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 18	0130	*2290	64.9	7.86	2.396	Jan. 9	1230	2270	64.3	7.84	2.390

Minimum discharge, 67 ft^3/s (1.90 m^3/s) July 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	341	274	685	339	355	174	461	629	197	128	108	140
2	1130	270	776	328	332	175	790	514	197	118	107	117
3	760	259	574	311	312	175	568	500	398	113	99	102
4	563	253	474	300	303	177	471	532	381	121	347	93
5	453	295	419	304	295	172	709	532	273	117	284	87
6	433	292	404	294	320	170	735	482	237	110	174	85
7	429	288	400	283	320	168	675	482	215	104	172	83
8	365	267	355	280	315	166	622	504	843	100	169	80
9	883	450	354	1440	310	169	529	1130	1080	97	163	80
10	1270	383	330	1200	300	167	498	990	936	96	173	77
11	842	441	305	750	290	161	573	638	541	96	136	130
12	577	375	300	600	280	165	1100	518	397	91	361	700
13	443	330	316	520	270	180	1220	460	342	87	521	441
14	432	319	664	500	260	202	1360	419	364	84	265	233
15	534	289	1780	460	250	317	996	514	319	96	167	188
16	490	314	1290	410	240	255	714	624	269	93	133	185
17	1490	388	741	390	235	218	624	729	237	164	117	163
18	1980	574	559	370	230	194	609	729	230	241	109	146
19	1170	411	498	360	225	193	734	609	234	132	104	165
20	787	342	447	330	220	186	843	469	254	107	98	148
21	627	325	436	330	210	236	1030	500	209	98	93	130
22	539	369	477	305	200	646	788	439	214	97	88	166
23	445	330	412	293	195	510	777	380	196	96	84	147
24	435	366	374	309	192	423	849	343	176	87	111	129
25	408	395	666	319	190	354	900	319	163	75	313	121
26	384	520	753	1210	188	324	793	292	154	71	195	114
27	363	454	472	1130	184	439	954	266	152	77	141	108
28	343	379	378	669	179	613	984	248	146	437	119	106
29	320	354	358	478	---	483	930	236	138	232	123	103
30	303	336	376	416	---	425	860	228	134	143	110	104
31	290	---	378	383	---	342	---	213	---	115	107	---
TOTAL	19959	10648	16770	15611	7200	8634	23696	15470	9626	3823	5291	4671
MEAN	644	355	541	504	257	279	790	499	321	123	171	156
MAX	1980	574	1780	1440	355	646	1360	1130	1080	437	521	700
MIN	290	253	300	280	179	161	461	213	134	71	84	77
CFSM	4.24	2.34	3.56	3.32	1.69	1.84	5.20	3.28	2.11	.81	1.13	1.03
IN.	4.89	2.61	4.10	3.82	1.76	2.11	5.80	3.79	2.36	.94	1.29	1.14

CAL YR 1977 TOTAL 156420 MEAN 430 MAX 3680 MIN 100 CFSM 2.83 IN 38.41
WTR YR 1978 TOTAL 141399 MEAN 387 MAX 1980 MIN 71 CFSM 2.55 IN 34.61

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01329650 HUDSON RIVER AT SCHUYLERVILLE, NY

LOCATION.--Lat 43°05'54", long 73°34'25", at Saratoga-Washington County line, Hydrologic Unit 02020003, at bridge on State Highway 29, 0.2 mi (0.3 km) east of Schuylerville, 0.8 mi (1.3 km) downstream from Batten Kill, and 1.0 mi (1.6 km) downstream from Champlain (Barge) Canal lock 5.

DRAINAGE AREA.--3,440 mi² (8,910 km²) approximately.

PERIOD OF RECORD.--Water years 1977 to current year.
MINOR ELEMENTS DATA: 1977 (e), 1978 (d).
PESTICIDE DATA: 1977 (e), 1978 (d).
ORGANIC DATA: PCB--1977 (e), 1978 (d).
PCN--1977 (e), 1978 (d).
NUTRIENT DATA: 1977 (e), 1978 (d).
SEDIMENT DATA: 1977 (e).

PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT DISCHARGE: March 1977 to current year.

REMARKS.--Water discharge estimated from data obtained at Hudson River at Stillwater (station 01331095), from staff gage located at downstream approach to lock 5, and from wire-weight gage located at bridge. Water-discharge records are poor. Streamflow affected by regulation for power generation and diversion for canal operations. No sediment data Jan. 24 to Mar. 10 due to ice cover.

COOPERATION.--Staff-gage records furnished by the New York State Department of Transportation.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum daily mean, 110 mg/L Jan. 10, 1978; minimum daily mean, 1 mg/L Apr. 20, 22, June 18-20, 1977, May 5, Aug. 8, 1978.
SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 5,080 tons (4,610 Mg) April 25, 1977; minimum daily, 9.2 tons (8.3 Mg) Aug. 11, 1978.

EXTREMES FOR CURRENT YEAR.--
SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum daily mean 110 mg/L Jan. 10; minimum daily mean, 1 mg/L May 5, Aug. 8.
SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 4,930 tons (4,470 Mg) Jan. 10; minimum daily, 9.2 tons (8.3 Mg) Aug. 11.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)	SOLIDS, VOLATILE, SUSPENDED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	IRON, TOTAL RECOVERABLE (UG/L AS FE)
OCT									
18...	1400	22700	33	3	.25	.56	.81	.06	1500
20...	0945	17400	9	0	.19	.91	1.1	.02	460
NOV									
09...	1100	9710	11	2	.27	.60	.87	.04	480
25...	1145	9610	3	3	.20	.31	.51	.03	30
DEC									
14...	1300	9300	6	2	.28	.42	.70	.02	240
MAR									
15...	1330	7990	10	0	.57	1.1	1.7	.06	560
28...	1030	15600	72	7	.60	1.1	1.7	.09	2900
APR									
13...	1100	13400	0	0	1.4	.50	1.9	.02	340
15...	1000	16700	10	2	.41	.57	.98	.02	510
MAY									
09...	1130	10300	7	0	.44	.56	1.0	.01	190
JUN									
01...	0945	5930	11	1	.48	.56	1.0	.02	190
JUL									
05...	1415	882	4	3	.68	1.4	2.1	.02	310
25...	1215	1550	5	2	.55	.50	1.1	.02	160
AUG									
14...	1100	3370	13	2	.43	.52	.95	.04	790
23...	1030	3370	0	0	.45	.49	.94	.02	150
31...	1250	3220	10	8	.65	1.3	2.0	.02	190

01329650 HUDSON RIVER AT SCHUYLERVILLE, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	PCB, TOTAL (UG/L)	NAPHTHALENES, POLYCHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLORDANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)
OCT									
18...	1	80	1.4	.00	.00	.0	.00	.00	.00
20...	8	30	.6	.00	.00	.0	.00	.00	.00
NOV									
09...	0	20	.3	.00	.00	.0	.00	.00	.00
25...	10	10	.1	.00	.00	.0	.00	.00	.00
DEC									
14...	20	20	.3	.00	.00	.0	.00	.00	.00
MAR									
15...	18	40	.2	.00	.00	.0	.00	.00	.00
28...	10	70	.4	.00	.00	.0	.00	.00	.00
APR									
13...	7	20	.4	.00	.00	.0	.00	.00	.00
15...	12	30	.0	.00	.00	.0	.00	.00	.00
MAY									
09...	4	20	.4	.00	.00	.0	.00	.00	.00
JUN									
01...	6	20	.9	.00	.00	.0	.00	.00	.00
JUL									
05...	20	10000	.1	.00	.00	.0	.00	.00	.00
25...	5	40	.4	.00	.00	.0	.00	.00	.00
AUG									
14...	19	60	.6	.00	.00	.0	.00	.00	.00
23...	5	40	.9	.00	.00	.0	.00	.00	.00
31...	13	20	.6	.00	.00	.0	.00	.00	.00

DATE	DIELDRIN TOTAL (UG/L)	ENDOSULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	HEPTACHLOR, TOTAL (UG/L)	HEPTACHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	MIREX, TOTAL (UG/L)	TOXAPHENE, TOTAL (UG/L)
OCT								
18...	.00	--	.00	.00	.00	.00	.00	0
20...	.00	--	.00	.00	.00	.00	.00	0
NOV								
09...	.00	--	.00	.00	.00	.00	.00	0
25...	.00	--	.00	.00	.00	.00	.00	0
DEC								
14...	.00	--	.00	.00	.00	.00	.00	0
MAR								
15...	.00	--	.00	.00	.00	.00	.00	0
28...	.00	--	.00	.00	.00	.00	.00	0
APR								
13...	.00	--	.00	.00	.00	.00	.00	0
15...	.00	--	.00	.00	.00	.00	.00	0
MAY								
09...	.00	--	.00	.00	.00	.00	.00	0
JUN								
01...	.00	.00	.00	.00	.00	.00	.00	0
JUL								
05...	.00	.00	.00	.00	.00	.00	.00	0
25...	.00	.00	.00	.00	.00	.00	.00	0
AUG								
14...	.00	.00	.00	.00	.00	.00	.00	0
23...	.00	.00	.00	.00	.00	.00	.00	0
31...	.00	.00	.00	.00	.00	.00	.00	0

01329650 HUDSON RIVER AT SCHUYLERVILLE, NY--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	8920	35	843	7120	8	154	9710	10	262
2	12300	34	1130	7620	5	103	9900	16	428
3	13700	18	666	7230	20	390	9800	5	132
4	13300	12	431	7270	15	294	9610	4	104
5	11500	10	310	7080	24	459	8230	16	356
6	10400	7	197	7280	14	275	9020	8	195
7	10400	10	281	4840	8	105	9710	10	262
8	8270	10	223	8850	15	358	9710	7	184
9	7940	12	257	9800	18	476	10400	5	140
10	11100	30	899	9900	17	454	8710	10	235
11	12200	37	1220	10100	15	409	8860	12	287
12	11400	19	585	10900	13	383	8430	15	341
13	10600	10	286	10700	10	289	8590	10	232
14	10400	10	281	8180	9	199	9710	18	472
15	10300	10	278	8880	14	336	12500	41	1380
16	10300	12	334	9710	15	393	12600	22	748
17	12400	41	1370	9560	9	232	11600	14	438
18	20800	58	3260	9900	19	508	10500	14	397
19	20500	32	1770	9800	22	582	8180	13	287
20	17500	12	567	9380	9	228	9800	20	529
21	15000	9	364	6050	8	131	10200	18	496
22	12900	9	313	8650	6	140	11000	17	505
23	12500	10	337	9440	10	255	10400	15	421
24	11700	15	474	9250	13	325	9610	15	389
25	11100	12	360	9610	4	104	9710	15	393
26	10600	13	372	10600	14	401	10800	8	233
27	9610	5	130	10600	8	229	10700	17	491
28	9610	16	415	9000	7	170	9290	10	251
29	8950	17	411	8090	15	328	9090	9	221
30	7780	11	231	7700	7	146	9070	8	196
31	5460	12	177	---	---	---	9090	7	172
TOTAL	359440	---	18772	263090	---	8856	304530	---	11177

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JANUARY			FEBRUARY			MARCH	
1	8920	22	530	10400			5270	---	---
2	8460	10	228	9800			5370	---	---
3	9250	6	150	9460			5220	---	---
4	8610	8	186	9420			5220	---	---
5	8410	15	341	9230			4010	---	---
6	7840	10	212	9030			3320	---	---
7	7690	9	187	8650			4710	---	---
8	7690	20	415	8650			4960	---	---
9	12000	50	1620	8570			5070	---	---
10	16600	110	4930	7810			5270	---	---
11	16100	85	3690	7750			5270	2	28
12	14900	48	1930	7200			3720	14	141
13	13800	19	708	7200			3170	9	77
14	12800	20	691	7130			5370	11	159
15	12500	25	844	6660			7620	10	206
16	11800	21	669	6430			8270	4	89
17	10800	30	875	6490			7260	2	39
18	10000	44	1190	6370			7260	3	59
19	9800	46	1220	6540			5860	3	47
20	9330	45	1130	6370			4600	9	112
21	9010	36	876	6080			7310	8	158
22	9070	17	416	6200			9390	24	608
23	9390	13	330	5920			9710	20	524
24	8950	---	---	5860			9900	16	428
25	8820	---	---	5920			9010	8	195
26	11200	---	---	4400			7310	25	493
27	14200	---	---	3270			8890	45	1080
28	13600	---	---	5010			14500	80	3130
29	12500	---	---	---			11600	35	1100
30	11600	---	---	---			10200	15	413
31	10800	---	---	---			9390	14	355
TOTAL	336440	---	23368	201820			214030	---	9441

01329650 HUDSON RIVER AT SCHUYLERVILLE, NY--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	9710	30	787	12200	6	198	5810	9	141
2	10400	25	702	10500	10	283	5860	11	174
3	9800	13	344	9070	7	171	6660	23	414
4	9520	8	206	8010	5	108	6600	6	107
5	9460	16	409	7810	1	21	4600	3	37
6	9900	20	535	7620	3	62	5320	5	72
7	10200	12	330	7200	13	253	5540	6	90
8	9800	14	370	7260	4	78	6660	12	216
9	9390	6	152	8200	6	133	8320	18	404
10	8890	4	96	10700	9	260	8200	25	553
11	8760	5	118	14400	11	428	6890	5	93
12	10200	7	193	12800	8	276	4960	4	54
13	12400	10	335	12200	8	264	6030	6	98
14	15000	30	1220	11600	7	219	5860	5	79
15	15600	15	632	11400	8	246	4600	4	50
16	13800	8	298	11900	25	803	4490	4	48
17	12200	5	165	12600	8	272	4020	4	43
18	11300	2	61	13600	10	367	3650	3	30
19	11200	3	91	13100	7	248	3130	6	51
20	11900	4	129	12200	11	362	3950	6	64
21	12900	3	104	10300	4	111	4200	10	113
22	12800	5	173	8640	6	140	4400	10	119
23	12100	2	65	9800	8	212	4330	13	152
24	12200	5	165	9390	7	177	4200	4	45
25	12200	5	165	8130	5	110	3510	11	104
26	12400	8	268	8010	5	108	2110	7	40
27	12500	15	506	7380	7	139	3100	2	17
28	13500	9	328	6600	8	143	3520	8	76
29	13500	7	255	4250	4	46	3160	13	111
30	13300	7	251	4010	7	75	3220	4	35
31	---	---	---	5540	37	563	---	---	---
TOTAL	346830	---	9453	296520	---	6877	146900	---	3630

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JULY			AUGUST			SEPTEMBER	
1	2620	4	28	3090	8	67	3110	4	34
2	2110	7	40	3430	5	46	3110	4	34
3	1120	4	12	3980	8	86	2600	31	218
4	1960	5	26	4560	32	394	1150	10	31
5	932	5	13	4530	35	428	1790	5	24
6	2780	8	60	3130	9	76	2610	5	35
7	2670	9	65	3380	9	82	2730	8	59
8	2830	3	23	3900	6	63	2850	5	38
9	1970	3	16	3590	3	29	2720	7	51
10	1320	5	18	3600	5	49	1740	7	33
11	3040	3	25	3420	1	9.2	1400	7	26
12	2700	5	36	3870	14	146	4460	13	157
13	2380	5	32	3660	13	128	4980	14	188
14	2110	5	28	3150	14	119	4740	11	141
15	2600	3	21	4110	7	78	4640	5	63
16	1910	4	21	3610	7	68	4700	5	63
17	1370	10	37	3630	9	88	3340	5	45
18	2920	10	79	3370	5	45	2970	4	32
19	2980	8	64	3280	5	44	3710	5	50
20	2950	4	32	1500	5	22	3810	5	51
21	2620	6	42	1980	6	32	3350	5	45
22	2370	13	83	3130	6	51	3430	5	46
23	2180	4	24	3100	8	67	3210	4	35
24	1540	8	33	3030	4	33	2630	5	36
25	1730	4	19	3190	4	34	2550	26	179
26	2020	9	49	3160	5	43	2930	20	158
27	2210	8	48	2360	4	25	2910	48	377
28	2980	18	145	2500	9	61	3270	20	177
29	3140	14	119	2620	5	35	3670	5	50
30	2660	7	50	2910	4	31	2070	2	11
31	1700	7	32	3200	6	52	---	---	---
TOTAL	70422	---	1320	102070	---	2531.2	93180	---	2487

01330500 KAYADEROSSERAS CREEK NEAR WEST MILTON, NY

LOCATION.--Lat 43°02'18", long 73°54'35", Saratoga County, Hydrologic Unit 02020003, on left bank 600 ft (183 m) downstream from Glowegee Creek, 1.0 mi (1.6 km) east of West Milton, and 3.5 mi (5.6 km) northwest of Ballston Spa. Water-quality sampling site at discharge station.

DRAINAGE AREA.--90.1 mi^2 (233.4 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1927 to current year.

REVISED RECORDS.--WSP 741: Drainage area. WSP 1202: 1935-40.

GAGE.--Water-stage recorder. Datum of gage is 376.06 ft (114.623 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records poor prior to April 1978 and good thereafter. Slight occasional diurnal fluctuation at low flow caused by mills above station.

AVERAGE DISCHARGE.--51 years, 137 ft^3/s (3.880 m^3/s), 20.67 in/yr (525 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,710 ft^3/s (133 m^3/s) Mar. 18, 1936, gage height, 10.78 ft (3.286 m), from floodmarks; maximum gage height, 11.20 ft (3.414 m) Mar. 14, 1977, from floodmarks; minimum discharge, 6.1 ft^3/s (0.17 m^3/s) Aug. 23, 1927, gage height, 0.86 ft (0.262 m); minimum daily, 12 ft^3/s (0.34 m^3/s) Aug. 5-9, Sept. 8, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,090 ft^3/s (30.9 m^3/s) Oct. 17, gage height, 4.94 ft (1.506 m), no peak above base of 1,200 ft^3/s (34 m^3/s); minimum, 20 ft^3/s (0.57 m^3/s) Sept. 7, gage height, 1.20 ft (0.366 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	230	96	560	160	170	68	596	123	70	38	64	37
2	579	91	350	150	150	62	706	118	69	37	57	34
3	360	91	250	140	150	58	487	113	122	36	52	30
4	300	89	190	140	140	52	360	108	120	47	121	29
5	250	116	170	170	140	50	586	107	95	44	80	27
6	190	107	160	190	130	48	541	112	86	39	62	26
7	130	100	150	180	130	48	504	108	95	35	67	25
8	350	230	150	180	130	50	431	104	352	33	76	24
9	400	220	140	579	130	56	386	240	329	32	59	24
10	547	230	140	530	120	64	368	245	210	31	55	21
11	250	290	180	400	120	79	374	167	134	29	47	45
12	220	250	240	300	120	100	482	139	104	29	120	205
13	190	210	230	240	110	130	471	126	101	28	136	123
14	160	161	300	210	110	170	441	126	97	28	77	69
15	230	141	773	190	110	250	348	264	81	30	58	59
16	350	141	530	160	100	230	283	295	70	32	49	57
17	560	145	360	150	100	160	258	386	65	205	44	51
18	645	203	267	140	96	110	241	428	73	121	39	46
19	370	163	237	130	94	96	244	322	77	65	38	82
20	350	135	210	120	92	94	360	222	69	50	36	70
21	290	131	212	130	90	110	369	187	61	44	33	55
22	230	180	240	140	88	180	271	153	68	43	32	48
23	180	147	210	130	84	270	230	133	61	40	29	50
24	150	230	183	150	80	280	214	120	54	37	29	41
25	130	200	245	300	76	220	190	112	50	31	43	40
26	120	580	270	769	72	207	175	102	48	31	45	36
27	114	260	220	855	70	638	160	93	51	32	40	35
28	111	193	200	575	72	761	148	86	52	86	36	34
29	105	173	160	350	---	600	137	81	48	63	37	32
30	99	156	150	250	---	484	130	77	43	48	32	31
31	96	---	150	190	---	452	---	73	---	42	33	---
TOTAL	8286	5459	7827	8298	3074	6177	10491	5070	2955	1486	1726	1486
MEAN	267	182	252	268	110	199	350	164	98.5	47.9	55.7	49.5
MAX	645	580	773	855	170	761	706	428	352	205	136	205
MIN	96	89	140	120	70	48	130	73	43	28	29	21
CFSM	2.96	2.02	2.80	2.97	1.22	2.21	3.89	1.82	1.09	.53	.62	.55
IN.	3.42	2.25	3.23	3.43	1.27	2.55	4.33	2.09	1.22	.61	.71	.61

CAL YR 1977 TOTAL 67727 MEAN 186 MAX 2500 MIN 22 CFSM 2.06 IN 27.96
WTR YR 1978 TOTAL 62335 MEAN 171 MAX 855 MIN 21 CFSM 1.90 IN 25.74

01330500 KAYADEROSSERAS CREEK NEAR WEST MILTON, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1953 to March 1978 (discontinued).
CHEMICAL DATA: 1954-55 (e), 1957 (a), 1958-59 (b), 1970-72 (a).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1952 to June 1970, June 1971 to March 1978 (discontinued).
SUSPENDED-SEDIMENT DISCHARGE: Feburary 1953 to June 1955.

INSTRUMENTATION.--Temperature recorder since October 1952.

REMARKS.--Unpublished records of daily temperatures (June 1950 to September 1952) are available in files of the Geological Survey. No record Oct. 25 to Nov. 29, Feb. 27, 28, due to instrument malfunction.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 28.5°C July 10, 1955; minimum, freezing point on many days during winter periods, except 1953, 1965, 1975, and 1978.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Minimum, 0.5°C Dec. 8-13, Mar. 1-7, 9-19.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	12.5	12.0	---	---	3.0	2.5	1.5	1.5	1.5	1.5	1.0	.5
2	12.5	12.5	---	---	3.0	2.5	1.5	1.5	1.5	1.5	1.0	.5
3	12.5	11.5	---	---	3.0	3.0	1.5	1.5	1.5	1.5	1.0	.5
4	11.5	10.5	---	---	3.0	2.5	1.5	1.5	2.0	1.5	1.0	.5
5	11.5	10.5	---	---	2.5	1.0	1.5	1.5	2.0	1.5	1.0	.5
6	11.5	10.5	---	---	1.0	1.0	1.5	1.5	1.5	1.5	1.0	.5
7	10.5	9.5	---	---	1.0	1.0	1.5	1.5	1.5	1.5	1.0	.5
8	9.5	9.0	---	---	1.0	.5	1.5	1.5	1.5	1.5	1.0	1.0
9	9.5	9.0	---	---	1.0	.5	1.5	1.5	1.5	1.5	1.0	.5
10	9.0	9.0	---	---	1.0	.5	1.5	1.5	1.5	1.5	1.0	.5
11	9.0	8.5	---	---	.5	.5	1.5	1.5	1.5	1.0	1.0	.5
12	9.5	8.5	---	---	.5	.5	1.5	1.5	1.0	1.0	1.0	.5
13	8.5	8.0	---	---	1.0	.5	1.5	1.5	1.0	1.0	.5	.5
14	8.0	8.0	---	---	1.0	1.0	1.5	1.5	1.0	1.0	.5	.5
15	8.0	8.0	---	---	1.0	1.0	1.5	1.5	1.0	1.0	.5	.5
16	8.0	7.0	---	---	1.0	1.0	1.5	1.5	1.0	1.0	.5	.5
17	7.5	7.0	---	---	1.0	1.0	1.5	1.5	1.0	1.0	1.0	.5
18	7.5	7.0	---	---	1.0	1.0	1.5	1.5	1.0	1.0	1.0	.5
19	7.0	6.5	---	---	1.0	1.0	1.5	1.5	1.0	1.0	1.5	.5
20	7.0	6.5	---	---	1.0	1.0	1.5	1.5	1.0	1.0	2.0	1.0
21	6.5	6.0	---	---	1.0	1.0	1.5	1.5	1.0	1.0	2.0	1.5
22	6.5	6.0	---	---	1.0	1.0	1.5	1.5	1.0	1.0	2.0	1.5
23	6.0	5.5	---	---	1.0	1.0	1.5	1.5	1.0	1.0	2.5	1.5
24	5.5	5.5	---	---	1.5	1.0	1.5	1.0	1.0	1.0	2.5	1.0
25	---	---	---	---	1.5	1.5	1.0	1.0	1.0	1.0	2.0	1.0
26	---	---	---	---	1.5	1.5	1.0	1.0	1.0	1.0	2.0	1.0
27	---	---	---	---	1.5	1.5	1.0	1.0	---	---	1.0	1.0
28	---	---	---	---	1.5	1.5	1.0	1.0	---	---	1.5	1.0
29	---	---	---	---	1.5	1.5	1.0	1.0	---	---	2.0	1.0
30	---	---	3.0	2.0	1.5	1.5	1.5	1.0	---	---	3.0	1.5
31	---	---	---	---	1.5	1.5	1.5	1.5	---	---	3.5	1.5
MONTH	12.5	5.5	3.0	2.0	3.0	.5	1.5	1.0	2.0	1.0	3.5	.5

01331095 HUDSON RIVER AT STILLWATER, NY

LOCATION.--Lat 42°56'16", long 73°39'04" at Saratoga-Rensselaer County line, Hydrologic Unit 02020003, at bridge on State Highway 67 in Stillwater, 0.4 mi (0.6 km) upstream from Champlain (Barge) Canal lock 4, and 0.9 mi (1.4 km) upstream from Hoosic River.

DRAINAGE AREA.--3,773 mi^2 (9,772 km^2).

PERIOD OF RECORD.--Water years 1969 to 1975, 1977 to current year.
CHEMICAL DATA: 1969 (c), 1970-74 (d), 1975 (c).
MINOR ELEMENTS DATA: 1972 (b), 1973-75 (a), 1977-78 (e).
PESTICIDE DATA: 1977-78 (e).
ORGANIC DATA: TOC--1974 (a), 1975 (c).
PCB--1977-78 (e).
PCN--1977-78 (e).
NUTRIENT DATA: 1969 (c), 1970-74 (d), 1975 (c), 1977-78 (e).
SEDIMENT DATA: 1977 (d), 1978 (a).

PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT DISCHARGE: March 1977 to current year.

REMARKS.--Water discharge estimated Oct. 1, 1977 to Jan. 8, 1978, Feb. 4-9, 1978, and June 15 to Aug. 1, 1978, from staff gage located at upstream approach to lock 4 and from wire-weight gage located at bridge. Water-stage recorder installed Jan. 8, 1978. Water-discharge records are poor. Streamflow affected by regulation for power generation and diversion for canal operations.

COOPERATION.--Staff-gage records furnished by the New York State Department of Transportation.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum daily mean, 119 mg/L March 28, 1978; minimum daily mean, 2 mg/L on several days each year.
SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 5,720 tons (5,190 Mg) April 25, 1977; minimum daily 7.5 (6.8 Mg) July 10, 1978.

EXTREMES FOR CURRENT YEAR.--
SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum daily mean 119 Mg/L March 28; minimum daily mean, 2 mg/L on several days.
SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 5,480 tons (4,970 Mg) Oct. 18; minimum daily, 7.5 tons (6.8 Mg) July 10.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	SOLIDS, VOLA-TILE, SUS-PENDED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)
OCT									
03...	1400	14000	23	3	.26	.57	.83	.08	800
18...	1300	23100	71	7	.29	1.5	1.8	.13	2800
19...	1345	20800	30	2	.24	.52	.76	.04	1000
NOV									
09...	0700	10200	13	2	.27	1.0	1.3	.05	630
25...	1245	9350	6	3	.29	.30	.59	.03	1600
DEC									
16...	0800	12500	25	4	.39	.38	.77	.04	1000
JAN									
09...	1245	13300	130	11	.42	.72	1.1	.13	4100
FEB									
09...	1415	7970	6	0	.29	.60	.89	.02	250
MAR									
14...	1515	8380	8	0	.48	.84	1.3	.03	310
22...	1130	9880	27	4	.47	.68	1.2	.04	1100
27...	1345	9100	61	4	.46	.85	1.3	.06	2200
28...	0915	8900	125	11	.48	1.2	1.7	.14	4700
28...	1430	14800	115	7	.48	1.2	1.7	.15	5200
29...	1230	11500	33	2	.48	.81	1.3	.05	1400
APR									
06...	1145	10000	11	0	.53	.61	1.1	.02	1700
12...	1230	10700	8	6	.54	.44	1.0	.02	320
13...	1245	12300	6	4	.80	.55	1.4	.01	460
14...	1400	17600	20	6	.40	.01	.41	.03	600
15...	1230	15500	17	6	.63	.60	1.2	.02	680
16...	0945	14000	12	2	.44	.12	.56	.02	440
25...	1200	14200	4	3	.33	.28	.61	.02	260
MAY									
10...	0800	11000	6	0	.46	.46	.92	.01	280
19...	1145	14600	6	0	.35	.57	.92	.01	560
JUN									
01...	1045	6990	15	2	.86	.73	1.6	.02	310
06...	1345	6050	3	0	.50	.61	1.1	.02	340
16...	0730	6100	11	5	.50	.55	1.1	.02	390
20...	1645	4270	9	9	.61	.81	1.4	.02	340
26...	1300	1320	7	0	.73	.92	1.7	.02	310
JUL									
05...	1530	1680	2	0	1.6	.84	2.4	.02	270
24...	1445	729	4	2	.51	.67	1.2	.02	150
AUG									
04...	1630	4270	0	0	.47	.56	1.0	.03	540
23...	1200	3250	0	0	.44	.60	1.0	.02	590
31...	1350	3350	6	10	.56	.86	1.4	.02	330
SEP									
05...	0945	--	9	1	.72	.81	1.5	.01	170
26...	1500	3200	2	0	.55	.66	1.2	.02	180

01331095 HUDSON RIVER AT STILLWATER, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	PCB, DIS-SOLVED (UG/L)	PCB, TOTAL (UG/L)	NAPH-THA-LENES, POLY-CHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR-DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)
OCT									
03...	5	40	--	.2	.00	.00	.0	.00	.00
18...	4	110	--	2.4	.00	.00	.0	.00	.00
19...	6	70	--	1.8	.00	.00	.0	.00	.00
NOV									
09...	5	40	--	.3	.00	.00	.0	.00	.00
25...	8	20	--	.2	.00	.00	.0	.00	.00
DEC									
16...	41	40	--	.1	.00	.00	.0	.00	.00
JAN									
09...	5	110	--	.2	.00	.00	.0	.00	.00
FEB									
09...	4	20	--	.7	.00	.00	.0	.00	.00
MAR									
14...	12	30	--	.3	.00	.00	.0	.00	.00
22...	5	50	--	.3	.00	.00	.0	.00	.00
27...	22	60	--	.0	.00	.00	.0	.00	.00
28...	7	160	--	.4	.00	.00	.0	.00	.00
28...	18	140	--	.5	.00	.00	.0	.00	.00
29..	15	50	--	.2	.00	.00	.0	.00	.00
APR									
06...	21	20	--	.1	.00	.00	.0	.00	.00
12...	9	20	--	.3	.00	.00	.0	.00	.00
13...	7	20	--	--	--	--	--	--	--
14...	9	20	--	.4	.00	.00	.0	.00	.00
15...	14	30	--	.0	.00	.00	.0	.00	.00
16...	8	20	--	.0	.00	.00	.0	.00	.00
25...	2	20	--	.0	.00	.00	.0	.00	.00
MAY									
10...	17	30	--	.4	.00	.00	.0	.00	.00
19...	0	20	--	.4	.00	.00	.0	.00	.00
JUN									
01...	9	40	--	.9	.00	.00	.0	.00	.00
06...	2	30	--	.8	.00	.00	.0	.00	.00
16...	0	40	--	.0	.00	.00	.0	.00	.00
20...	15	30	--	.5	.00	.00	.0	.00	.00
26...	13	30	--	.4	.00	.00	.0	.00	.00
JUL									
05...	14	30	.5	.6	.00	.00	.0	.00	.00
24...	4	40	--	.5	.00	.00	.0	.00	.00
AUG									
04...	13	30	--	.5	.00	.00	.0	.00	.00
23...	4	50	--	.9	.00	.00	.0	.00	.00
31...	3	30	--	.9	.00	.00	.0	.00	.00
SEP									
05...	20	30	--	.4	.00	.00	.0	.00	.00
26...	23	30	--	.3	.00	.00	.0	.00	.00

01331095 HUDSON RIVER AT STILLWATER, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	DDT, TOTAL (UG/L)	DI-ELDRIN TOTAL (UG/L)	ENDO-SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	HEPTA-CHLOR, TOTAL (UG/L)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	MIREX, TOTAL (UG/L)	TOX-APHENE, TOTAL (UG/L)
OCT									
03...	.00	.00	--	.00	.00	.00	.00	.00	0
18...	.00	.00	--	.00	.00	.00	.00	.00	0
19...	.00	.00	--	.00	.00	.00	.00	.00	0
NOV									
09...	.00	.00	--	.00	.00	.00	.00	.00	0
25...	.00	.00	--	.00	.00	.00	.00	.00	0
DEC									
16...	.00	.00	--	.00	.00	.00	.00	.00	0
JAN									
09...	.00	.00	--	.00	.00	.00	.00	.00	0
FEB									
09...	.00	.00	--	.00	.00	.00	.00	.00	0
MAR									
14...	.00	.00	--	.00	.00	.00	.00	.00	0
22...	.00	.00	--	.00	.00	.00	.00	.00	0
27...	.00	.00	--	.00	.00	.00	.00	.00	0
28...	.00	.00	--	.00	.00	.00	.00	.00	0
28...	.00	.00	--	.00	.00	.00	.00	.00	0
29...	.00	.00	--	.00	.00	.00	.00	.00	0
APR									
06...	.00	.00	--	.00	.00	.00	.00	.00	0
12...	.00	.00	--	.00	.00	.00	.00	.00	0
13...	--	--	--	--	--	--	--	--	--
14...	.00	.00	--	.00	.00	.00	.00	.00	0
15...	.00	.00	--	.00	.00	.00	.00	.00	0
16...	.00	.00	--	.00	.00	.00	.00	.00	0
25...	.00	.00	--	.00	.00	.00	.00	.00	0
MAY									
10...	.00	.00	--	.00	.00	.00	.00	.00	0
19...	.00	.00	--	.00	.00	.00	.00	.00	0
JUN									
01...	.00	.00	.00	.00	.00	.00	.00	.00	0
06...	.00	.00	.00	.00	.00	.00	.00	.00	0
16...	.00	.00	.00	.00	.00	.00	.00	.00	0
20...	.00	.00	.00	.00	.00	.00	.00	.00	0
26...	.00	.00	.00	.00	.00	.00	.00	.00	0
JUL									
05...	.00	.00	.00	.00	.00	.00	.00	.00	0
24...	.00	.00	.00	.00	.00	.00	.00	.00	0
AUG									
04...	.00	.00	.00	.00	.00	.00	.00	.00	0
23...	.00	.00	.00	.00	.00	.00	.00	.00	0
31...	.00	.00	.00	.00	.00	.00	.00	.00	0
SEP									
05...	.00	.00	.00	.00	.00	.00	.00	.00	0
26...	.00	.00	.00	.00	.00	.00	.00	.00	0

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM
MAR , 1978											
28...	1515	16100	106	4610	43	58	74	88	94	99	100

01331095 HUDSON RIVER AT STILLWATER, NY--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	9280	11	276	7410	6	120	10100	12	327
2	12800	24	829	7930	3	64	10300	16	445
3	14300	26	1000	7520	4	81	10200	28	771
4	13800	17	633	7560	6	122	10000	10	270
5	12000	15	486	7370	5	99	8560	15	347
6	10800	10	292	7580	6	123	9390	5	127
7	10800	10	292	5040	2	27	10100	7	191
8	8600	7	163	9210	12	298	10100	8	218
9	8260	10	223	10200	12	330	10800	4	117
10	11500	24	745	10300	14	389	9060	13	318
11	12700	22	754	10500	12	340	9220	10	249
12	11900	17	546	11300	9	275	8770	10	237
13	11000	11	327	11100	10	300	8940	10	241
14	10800	12	350	8510	5	115	10100	10	273
15	10700	15	433	9240	7	175	13000	15	526
16	10700	21	607	10100	6	164	13100	20	707
17	12900	65	2260	9950	7	188	12100	16	523
18	21600	94	5480	10300	11	306	10900	15	441
19	21300	37	2130	10200	5	138	8510	9	207
20	18200	17	835	9760	7	184	10200	8	220
21	15600	12	505	6300	3	51	10600	14	401
22	13400	8	289	9000	6	146	11400	14	431
23	13000	9	316	9820	4	106	10800	12	350
24	12200	7	231	9620	2	52	10000	14	378
25	11600	7	219	10000	5	135	10100	15	409
26	11000	6	178	11000	18	535	11200	35	1060
27	10000	4	108	11000	18	535	11100	14	420
28	10000	6	162	9360	13	329	9670	14	366
29	9310	5	126	8420	7	159	9460	32	817
30	8090	6	131	8010	7	151	9440	21	535
31	5680	3	46	---	---	---	9460	7	179
TOTAL	373820	---	20972	273610	---	6037	316680	---	12101

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JANUARY			FEBRUARY			MARCH	
1	9280	16	401	10800	4	117	5480	13	192
2	8800	8	190	10200	19	523	5590	10	151
3	9620	38	987	9840	6	159	5430	12	176
4	8960	16	387	9800	7	185	5430	11	161
5	8750	4	94	9600	6	156	4170	15	169
6	8160	7	154	9400	4	102	3450	12	112
7	8000	14	302	9000	4	97	4900	21	278
8	8000	11	238	9000	4	97	5160	10	139
9	12500	64	2430	8920	4	96	5270	4	57
10	17300	60	2800	8130	3	66	5480	6	89
11	16800	35	1590	8060	12	261	5480	8	118
12	15500	34	1420	7490	3	61	3870	23	240
13	14400	25	972	7490	4	81	3300	8	71
14	13300	17	610	7420	4	80	5590	7	106
15	13000	23	807	6930	4	75	7930	12	257
16	12300	18	598	6690	3	54	8600	20	464
17	11200	17	514	6750	2	36	7550	8	163
18	10400	14	393	6630	5	90	7550	6	122
19	10200	14	386	6810	4	74	6100	17	280
20	9710	12	315	6630	4	72	4790	12	155
21	9380	14	355	6330	5	85	7610	12	247
22	9440	8	204	6450	4	70	9770	32	844
23	9770	7	185	6160	3	50	10100	33	900
24	9310	7	176	6100	3	49	10300	51	1420
25	9180	8	198	6160	5	83	9380	43	1090
26	11700	37	1170	4580	3	37	7610	15	308
27	14800	56	2240	3400	5	46	9250	64	2160
28	14200	34	1300	5210	13	183	15100	119	4850
29	13000	10	351	---	---	---	12100	48	1570
30	12100	7	229	---	---	---	10600	25	715
31	11200	7	212	---	---	---	9770	18	475
TOTAL	350260	---	22208	209980	---	3085	222710	---	18079

01331095 HUDSON RIVER AT STILLWATER, NY--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	10100	18	491	12700	7	240	6040	10	163
2	10800	28	816	10900	4	118	6100	17	280
3	10200	18	496	9440	4	102	6930	15	281
4	9910	13	348	8330	5	112	6870	12	223
5	9840	9	239	8130	4	88	4790	10	129
6	10300	10	278	7930	2	43	5540	7	105
7	10600	12	343	7490	11	222	5760	8	124
8	10200	6	165	7550	15	306	6930	12	225
9	9770	6	158	8530	4	92	8660	27	631
10	9250	10	250	11100	9	270	8530	18	415
11	9120	10	246	15000	14	567	7170	10	194
12	10600	16	458	13300	9	323	5160	7	98
13	12900	15	522	12700	11	377	6270	9	152
14	15600	18	758	12100	17	555	6100	8	132
15	16200	23	1010	11900	7	225	4790	8	103
16	14400	15	583	12400	10	335	4670	12	151
17	12700	7	240	13100	12	424	4180	32	361
18	11800	3	96	14100	16	609	3800	5	51
19	11700	4	126	13600	14	514	3260	29	255
20	12400	8	268	12700	7	240	4110	6	67
21	13400	7	253	10700	14	404	4370	3	35
22	13300	6	215	8990	7	170	4580	5	62
23	12600	7	238	10200	6	165	4510	10	122
24	12700	8	274	9770	8	211	4370	8	94
25	12700	6	206	8460	7	160	3650	8	79
26	12900	8	279	8330	5	112	2200	6	36
27	13000	6	211	7580	6	124	3230	7	61
28	14000	8	302	6870	10	185	3660	7	69
29	14000	9	340	4420	23	274	3290	16	142
30	13800	7	261	4170	14	158	3350	5	45
31	---	---	---	5870	10	158	---	---	---
TOTAL	360790	---	10470	308460	---	7883	152870	---	4885

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JULY			AUGUST			SEPTEMBER	
1	2730	5	37	3210	6	52	3240	4	35
2	2200	6	36	3570	5	48	3240	4	35
3	1170	5	16	4140	6	67	2700	4	29
4	2040	11	61	4740	20	256	1200	4	13
5	970	7	18	4710	14	178	1860	6	30
6	2890	3	23	3260	10	88	2720	6	44
7	2780	7	53	3520	7	67	2840	5	38
8	2940	7	56	4060	7	77	2960	4	32
9	2050	4	22	3730	8	81	2830	4	31
10	1380	2	7.5	3750	7	71	1810	4	20
11	3160	4	34	3560	4	38	1460	11	43
12	2810	7	53	4030	10	109	4640	6	75
13	2480	6	40	3810	12	123	5180	12	168
14	2200	4	24	3280	8	71	4930	5	67
15	2700	4	29	4280	12	139	4830	4	52
16	1990	5	27	3760	6	61	4890	4	53
17	1420	5	19	3780	7	71	3480	8	75
18	3040	3	25	3510	7	66	3090	9	75
19	3100	3	25	3410	6	55	3860	9	94
20	3070	4	33	1660	2	9.0	3960	5	53
21	2730	7	52	2060	9	50	3490	5	47
22	2470	5	33	3260	5	44	3570	6	58
23	2270	4	25	3230	6	52	3340	4	36
24	1600	4	17	3150	8	68	2740	4	30
25	1800	4	19	3320	7	63	2650	4	29
26	2100	6	34	3290	6	53	3050	10	82
27	2300	8	50	2460	8	53	3030	6	49
28	3100	9	75	2600	8	56	3400	4	37
29	3270	11	97	2730	6	44	3820	5	52
30	2770	9	67	3030	6	49	2150	6	35
31	1770	8	38	3330	6	54	---	---	---
TOTAL	73300	---	1145.5	106230	---	2313.0	96960	---	1517

01332500 HOOSIC RIVER NEAR WILLIAMSTOWN, MA

LOCATION.--Lat 42°42'21", long 73°10'50", Berkshire County, Hydrologic Unit 02020003, on left bank 1.0 mi (1.6 km) upstream from Green River and 1.2 mi (1.9 km) east of Williamstown.

DRAINAGE AREA.--132 mi² (342 km²).

PERIOD OF RECORD.--Discharge: July 1940 to current year.
Water-quality records: Water years 1953-54, 1957-58, 1967-69.

GAGE.--Water-stage recorder. Altitude of gage is 595 ft (181 m), from topographic map.

REMARKS.--Records good above 200 ft³/s (5.7 m³/s) and fair below. Prior to 1966, slight diurnal fluctuation at low flow caused by mills upstream. Some regulation by Cheshire Reservoir 17 mi (27 km) upstream. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--38 years, 275 ft³/s (7.788 m³/s), 28.29 in/yr (719 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,000 ft³/s (368 m³/s) Dec. 31, 1948, gage height, 14.85 ft (4.526 m), from rating curve extended above 4,300 ft³/s (120 m³/s) on basis of contracted-opening measurement of peak flow; minimum, 5.8 ft³/s (0.16 m³/s) Aug. 30, 31, Oct. 26, 1940; minimum daily, 25 ft³/s (0.71 m³/s) Sept. 2, 1968.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,400 ft³/s (68 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 17	1245	2840	80.4	6.06	1.847	Jan. 26	1400	2660	75.3	5.86	1.786
Jan. 9	1315	a*4710	133	8.02	2.444						

a From rating curve extended above 2,200 ft³/s (62 m³/s) on basis of slope-area measurements at gage heights 11.80 ft (3.597 m) and 13.02 ft (3.968 m).

Minimum discharge not determined; minimum daily, 50 ft³/s (1.42 m³/s) July 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	487	245	1220	277	340	135	774	308	145	110	72	105
2	1270	238	880	273	310	135	1140	277	145	92	70	85
3	639	227	644	260	292	135	719	259	160	87	64	76
4	542	223	547	260	285	135	559	255	210	110	160	72
5	403	285	456	248	263	130	785	241	175	95	130	67
6	365	308	450	245	263	130	729	234	160	80	170	64
7	330	259	397	238	263	130	724	223	170	72	185	62
8	292	345	335	241	259	125	639	210	487	66	397	60
9	1330	530	335	2500	240	125	542	325	319	64	185	58
10	1080	386	308	1060	225	125	547	530	263	62	135	57
11	639	600	280	695	215	125	659	316	200	80	110	78
12	498	397	280	559	210	130	1080	255	175	67	130	110
13	414	345	277	462	203	155	1140	234	150	62	135	78
14	403	312	508	432	195	288	1040	220	155	58	115	70
15	508	292	1380	381	190	514	739	330	140	60	105	66
16	403	386	790	335	185	277	614	397	120	72	95	68
17	2250	498	594	316	180	223	553	570	110	95	85	64
18	1330	679	468	304	175	200	547	530	130	90	76	64
19	795	438	420	300	170	194	664	468	180	72	72	110
20	895	345	381	273	165	197	810	330	263	64	68	86
21	664	335	403	285	165	270	824	350	165	67	66	73
22	547	426	487	273	160	659	644	300	200	58	64	68
23	468	340	381	259	155	468	659	263	160	56	62	65
24	414	365	335	255	150	432	649	241	135	54	60	62
25	381	325	724	308	150	335	629	241	120	51	85	60
26	345	795	639	1730	145	304	542	220	110	50	82	57
27	340	582	392	1130	140	619	547	195	105	65	76	56
28	308	420	330	669	140	679	498	175	100	256	74	55
29	285	365	308	503	---	605	438	165	135	110	78	54
30	266	340	300	430	---	559	392	160	150	75	76	53
31	255	---	308	375	---	519	---	155	---	65	90	---
TOTAL	19146	11631	15557	15876	5833	9057	20876	8977	5237	2465	3392	2103
MEAN	618	388	502	512	208	292	696	290	175	79.5	109	70.1
MAX	2250	795	1380	2500	340	679	1140	570	487	256	397	110
MIN	255	223	277	238	140	125	392	155	100	50	60	53
CFSM	4.68	2.94	3.80	3.88	1.58	2.21	5.27	2.20	1.33	.60	.83	.53
IN.	5.40	3.28	4.38	4.47	1.64	2.55	5.88	2.53	1.48	.69	.96	.59

CAL YR 1977 TOTAL 129249 MEAN 354 MAX 5540 MIN 60 CFSM 2.68 IN 36.42
WTR YR 1978 TOTAL 120150 MEAN 329 MAX 2500 MIN 50 CFSM 2.49 IN 33.86

NOTE.--No gage height record Feb. 14 to Mar. 13 and most days May 27 to Sept. 30.

01333000 GREEN RIVER AT WILLIAMSTOWN, MA

LOCATION.--Lat 42°42'32", long 73°11'50", Berkshire County, Hydrologic Unit 02020003, on left bank 0.1 mi (0.2 km) upstream from bridge on State Highway 2 at Williamstown and 0.8 mi (1.3 km) upstream from mouth.

DRAINAGE AREA.--42.6 mi^2 (110.3 km^2).

PERIOD OF RECORD.--Discharge: September 1949 to current year.
Water-quality records: Water years 1967-69.

GAGE.--Water-stage recorder. Altitude of gage is 615 ft (187 m), from topographic map.

REMARKS.--Records good except those for winter period, which are fair. Slight diurnal fluctuation at times caused by mill upstream. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--29 years, 83.7 ft^3/s (2.370 m^3/s), 26.68 in/yr (678 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,060 ft^3/s (115 m^3/s) Dec. 21, 1973, gage height, 5.68 ft (1.731 m) in gage well, from rating curve extended above 750 ft^3/s (21 m^3/s) on basis of slope-area measurement at gage height 4.94 ft (1.506 m); maximum gage height, 6.35 ft (1.935 m) Mar. 13, 1977, from floodmarks, gage height in well unknown; minimum discharge, 3.1 ft^3/s (0.088 m^3/s) Sept. 20, 22, 24, 25, 1964.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Dec. 31, 1948, reached a stage of about 7.5 ft (2.3 m), from floodmarks.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 850 ft^3/s (24 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 1	2215	948	26.8	3.63	1.106	Jan. 9	1345	1230	34.8	3.90	1.189
Oct. 17	0745	a1560	44.2	4.17	1.271	Jan. 26	1445	*a1730	49.0	4.30	1.311
Nov. 26	0800	1020	28.9	3.70	1.128	Mar. 14	1845	939	26.6	3.62	1.103
Dec. 14	2330	1110	31.4	3.79	1.155	Mar. 27	1345	997	28.2	3.68	1.122
Dec. 25	1245	901	25.5	3.58	1.091						

a From rating curve extended as explained above.

Minimum discharge, 5.3 ft^3/s (0.15 m^3/s) July 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	191	84	462	91	98	37	334	79	47	21	12	20
2	341	80	278	84	105	35	393	74	47	20	12	14
3	198	76	214	79	92	33	246	69	58	19	10	12
4	166	74	182	72	79	33	199	66	55	23	28	11
5	137	125	155	74	83	34	250	66	46	20	17	9.1
6	131	130	148	66	88	33	206	65	43	17	33	8.7
7	112	93	132	62	86	30	210	61	46	16	33	7.9
8	98	125	113	66	80	30	186	59	94	15	82	7.2
9	458	160	109	873	78	30	159	109	76	14	36	6.9
10	317	120	94	336	71	29	148	113	66	13	27	6.2
11	214	140	77	211	67	30	165	86	56	12	23	8.2
12	170	115	79	180	64	33	227	80	49	11	25	17
13	143	96	95	153	61	42	238	76	47	10	24	10
14	149	82	298	138	57	145	238	74	45	9.9	21	8.3
15	150	78	674	117	54	154	180	83	41	11	18	8.3
16	125	123	312	105	53	78	151	83	37	17	16	9.5
17	943	142	230	93	52	66	136	94	35	15	15	9.1
18	513	184	183	90	48	58	125	113	41	14	14	8.7
19	328	148	160	66	46	56	129	100	65	11	13	24
20	423	131	143	74	46	60	140	91	56	9.9	13	14
21	261	127	167	76	45	171	145	98	43	9.5	12	12
22	214	131	163	72	39	250	127	88	49	9.1	11	19
23	175	113	133	70	41	177	119	80	39	7.9	9.9	14
24	145	108	119	93	39	145	113	76	34	6.9	11	11
25	135	98	382	129	39	125	109	76	32	6.2	21	10
26	125	341	203	997	38	115	102	69	30	5.9	15	9.5
27	125	171	148	393	35	423	98	64	28	8.0	14	8.7
28	110	147	131	224	35	266	95	59	27	46	13	8.7
29	100	132	121	160	---	217	89	56	25	15	15	7.9
30	92	123	120	130	---	190	85	53	24	13	12	7.6
31	87	---	106	105	---	168	---	49	---	11	20	---
TOTAL	6876	3797	5931	5499	1719	3293	5142	2409	1381	437.3	625.9	328.5
MEAN	222	127	191	177	61.4	106	171	77.7	46.0	14.1	20.2	11.0
MAX	943	341	674	997	105	423	393	113	94	46	82	24
MIN	87	74	77	62	35	29	85	49	24	5.9	9.9	6.2
CFSM	5.21	2.98	4.48	4.16	1.44	2.49	4.01	1.82	1.08	.33	.47	.26
IN.	6.00	3.32	5.18	4.80	1.50	2.88	4.49	2.10	1.21	.38	.55	.29

CAL YR 1977 TOTAL 43212.0 MEAN 118 MAX 1800 MIN 13 CFSM 2.77 IN 37.73
WTR YR 1978 TOTAL 37438.7 MEAN 103 MAX 997 MIN 5.9 CFSM 2.42 IN 32.69

01333500 LITTLE HOOSIC RIVER AT PETERSBURG, NY

LOCATION.--Lat 42°45'50", long 73°20'16", Rensselaer County, Hydrologic Unit 02020003, on left bank 100 ft (30 m) downstream from highway bridge on dirt road, 1.0 mi (1.6 km) downstream from Petersburg, and 4.9 mi (7.9 km) upstream from mouth.

DRAINAGE AREA.--56.1 mi² (145 mi²).

PERIOD OF RECORD.--July 1951 to current year.

REVISED RECORDS.--WSP 1702: 1959.

GAGE.--Water-stage recorder. Datum of gage is 587.40 ft (179.039 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are poor.

AVERAGE DISCHARGE.--27 years, 95.7 ft³/s (2.710 m³/s), 23.17 in/yr (589 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,000 ft³/s (142 m³/s) June 30, 1973, gage height, 9.20 ft (2.804 m); minimum, 1.9 ft³/s (0.054 m³/s) Sept. 11, 12, 1964.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Dec. 31, 1948, reached a stage of 9.4 ft (2.87 m), from floodmarks, discharge, 7,470 ft³/s (212 m³/s), on basis of contracted-opening measurements of peak flow.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,250 ft³/s (35 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 9	0845	*2,330	66.0	*6.85	2.088	Mar. 27	1345	1,420	40.2	5.66	1.725
Jan. 26	0945	1,750	50.0	6.13	1.868						

Minimum discharge 4.6 ft³/s (0.13 m³/s) Sept. 7-11, gage height 1.87 ft (0.570 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	133	88	484	114	160	17	330	70	32	12	6.9	7.2
2	265	84	343	107	140	15	418	65	30	12	6.7	6.0
3	205	78	283	180	130	14	306	60	45	11	6.2	5.5
4	184	74	241	150	120	13	251	55	45	12	16	5.3
5	152	107	200	130	125	13	272	52	33	12	10	5.1
6	147	95	170	110	140	13	234	52	29	11	11	5.0
7	123	86	150	100	160	14	231	48	31	10	15	4.8
8	104	102	130	92	180	14	210	45	86	9.2	32	4.8
9	275	99	120	82	150	13	182	69	85	8.9	15	4.6
10	262	99	120	78	160	13	167	92	65	8.9	10	4.6
11	211	129	130	84	150	12	169	76	47	8.6	8.6	5.0
12	180	109	150	84	80	15	234	65	40	8.3	8.3	7.2
13	152	112	170	76	49	32	231	62	39	8.0	8.0	5.5
14	167	112	200	84	41	125	231	60	37	7.7	7.4	5.0
15	184	109	553	110	37	144	198	65	32	7.7	6.9	5.1
16	150	174	366	148	40	86	167	65	28	8.6	6.7	5.3
17	841	241	283	131	33	72	146	72	26	9.2	6.2	5.3
18	599	298	225	120	30	63	131	85	28	8.9	6.0	5.1
19	411	234	198	118	30	60	123	81	31	7.7	6.0	9.2
20	522	200	172	104	33	63	135	74	31	7.4	6.0	6.4
21	363	180	182	112	36	172	142	86	24	6.9	5.5	6.0
22	290	170	187	116	29	286	133	76	28	6.7	5.3	8.9
23	234	160	153	99	25	216	121	69	22	6.4	5.3	6.7
24	198	140	140	102	22	185	112	63	20	6.2	5.3	6.0
25	172	150	302	133	19	157	105	62	18	6.0	7.2	5.5
26	150	352	241	961	18	144	99	54	17	6.0	6.4	5.1
27	137	231	200	476	18	509	92	48	17	6.0	6.0	5.1
28	123	204	150	322	20	376	88	43	16	15	5.5	5.0
29	110	185	130	238	---	302	82	40	15	7.4	5.8	4.8
30	102	174	120	201	---	251	76	36	14	6.9	5.3	4.8
31	94	---	110	180	---	219	---	35	---	6.7	6.7	---
TOTAL	7240	4576	6603	5142	2175	3628	5416	1925	1011	269.3	263.2	169.9
MEAN	234	153	213	166	77.7	117	181	62.1	33.7	8.69	8.49	5.66
MAX	841	352	553	961	180	509	418	92	86	15	32	9.2
MIN	94	74	110	76	18	12	76	35	14	6.0	5.3	4.6
CFSM	4.17	2.73	3.80	2.96	1.39	2.09	3.23	1.11	.60	.16	.15	.10
IN.	4.80	3.03	4.38	3.41	1.44	2.41	3.59	1.28	.67	.18	.17	.11

CAL YR 1977 TOTAL 50533.0 MEAN 138 MAX 3090 MIN 14 CFSM 2.46 IN 33.51
WTR YR 1978 TOTAL 38418.4 MEAN 105 MAX 961 MIN 4.6 CFSM 1.87 IN 25.47

01334000 WALLOOMSAC RIVER NEAR NORTH BENNINGTON, VT

LOCATION.--Lat 42°54'47", long 73°15'25", Bennington County, Hydrologic Unit 02020003, on left bank 0.6 mi (1.0 km) downstream from Paran Creek and 1.4 mi (2.3 km) south of North Bennington.

DRAINAGE AREA.--111 mi^2 (287 km^2).

PERIOD OF RECORD.--Discharge: June 1931 to current year.
Water-quality records: Water years 1953-54.

REVISED RECORDS.--WSP 781: 1933(M).

GAGE.--Water-stage recorder. Altitude of gage is 525 ft (160 m), from topographic map.

REMARKS.--Records good except those for winter period and periods of no gage-height record, Jan. 10-31, July 11 to Aug. 20, which are fair. Occasional diurnal fluctuation at low flow caused by mills upstream; diurnal fluctuation greater prior to 1960. Diversion upstream for municipal supply of Bennington and North Bennington since 1961. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--47 years, 222 ft^3/s (6.287 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,450 ft^3/s (239 m^3/s) Sept. 21, 1938, gage height, 12.04 ft (3.670 m), from rating curve extended above 2,800 ft^3/s (79 m^3/s) on basis of contracted-opening measurements at gage heights 10.13 ft (3.088 m), 10.49 ft (3.197 m), 11.50 ft (3.505 m), and 12.04 ft (3.670 m) and slope-area measurement and computation of flow over dam at gage height 12.04 ft (3.670 m); minimum, 4 ft^3/s (0.1 m^3/s) Sept. 27, 1932; minimum daily, 21 ft^3/s (0.59 m^3/s) Sept. 22, 23, 1964, July 12, 1965.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,000 ft^3/s (57 m^3/s) and maximum (*):

Date	Time	Discharge		Gage height		Date	Time	Discharge		Gage height	
		(ft^3/s)	(m^3/s)	(ft)	(m)			(ft^3/s)	(m^3/s)	(ft)	(m)
Oct. 17	1545	2040	57.8	5.72	1.743	Jan. 26	-	2300	65	-	-
Jan. 9	1115	*3670	104	7.67	2.338						

Minimum discharge, 15 ft^3/s (0.42 m^3/s) Sept. 3; minimum daily, 33 ft^3/s (0.93 m^3/s) Sept. 10

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	218	156	836	211	250	105	400	354	104	93	69	60
2	658	149	664	201	241	105	600	301	114	83	64	58
3	376	143	473	185	210	110	450	283	235	75	54	44
4	345	145	398	181	215	102	310	278	216	76	140	36
5	273	184	345	190	205	105	460	270	143	74	110	38
6	284	195	335	184	210	98	520	255	123	67	86	35
7	268	168	313	175	220	95	470	243	117	62	120	34
8	223	182	269	175	225	93	400	232	408	59	200	34
9	772	245	276	2000	215	91	330	374	517	57	90	34
10	676	209	220	950	210	94	350	481	361	56	76	33
11	388	296	185	550	205	95	500	320	223	54	68	57
12	300	229	180	410	195	103	800	258	172	52	93	229
13	255	205	185	350	182	121	900	229	166	50	110	120
14	245	196	480	300	166	187	750	211	190	48	80	77
15	318	183	1300	270	153	292	550	243	157	52	65	64
16	287	233	800	260	145	181	410	268	133	60	60	66
17	1430	316	450	250	143	141	370	288	120	60	54	63
18	972	479	360	240	139	125	391	326	127	68	50	55
19	580	308	320	230	134	121	457	291	188	60	46	92
20	508	250	290	210	130	121	545	236	234	55	43	89
21	407	255	345	200	125	195	688	285	145	51	41	63
22	344	366	394	195	125	501	490	244	144	48	39	54
23	301	279	309	190	120	315	511	203	123	46	37	51
24	267	314	275	185	115	258	547	184	110	44	42	49
25	246	281	478	200	115	211	548	172	99	42	69	47
26	226	548	415	1300	113	197	497	156	95	41	64	45
27	217	423	265	800	111	390	562	143	93	45	51	44
28	205	326	221	450	105	430	550	132	127	190	49	43
29	184	292	214	330	---	340	505	124	163	90	48	43
30	172	275	235	290	---	280	452	115	133	74	45	43
31	165	---	246	270	---	250	---	108	---	62	49	---
TOTAL	12110	7830	12076	11932	4722	5852	15313	7607	5285	1994	2212	1800
MEAN	391	261	390	385	169	189	510	245	176	64.3	71.4	60.0
MAX	1430	548	1300	2000	250	501	900	481	517	190	200	229
MIN	165	143	180	175	105	91	310	108	93	41	37	33

CAL YR 1977 TOTAL 108406 MEAN 297 MAX 5250 MIN 59
WTR YR 1978 TOTAL 88728 MEAN 243 MAX 2000 MIN 33

01334500 HOOSIC RIVER NEAR EAGLE BRIDGE, NY

LOCATION.--Lat 42°56'19", long 73°22'39", Rensselaer County, Hydrologic Unit 02020003, on right bank 0.5 mi (0.8 km) upstream from Case Brook, 1.2 mi (1.9 km) downstream from Walloomsac River, and 1.2 mi (1.9 km) southeast of Eagle Bridge.

DRAINAGE AREA.--510 mi^2 (1,321 km^2).

PERIOD OF RECORD.--August 1910 to March 1922, July 1923 to current year.

REVISED RECORDS.--WSP 741: Drainage area. WSP 756: 1913(m). WSP 1302: 1922(M). WSP 1432: 1913 (minimum gage height). WSP 1502: 1911-12, 1914, 1920-21, 1928(M), 1936(M).

GAGE.--Water-stage recorder. Datum of gage is 355.41 ft (108.329 m) National Geodetic Vertical Datum of 1929. Prior to March 1922, nonrecording gage and July 24, 1923 to July 18, 1936, water-stage recorder, at site 0.2 mi (0.3 km) upstream at different datums.

REMARKS.--Records good except those for winter periods, which are poor. Diurnal fluctuation at medium and low flow caused by powerplants above station.

AVERAGE DISCHARGE.--66 years (1910-21, 1923-78), 943 ft^3/s (26.71 m^3/s), 25.08 in/yr (637 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 55,400 ft^3/s (1,570 m^3/s) Dec. 31, 1948, gage height, 21.15 ft (6.447 m), from highwater mark in gage house, from rating curve extended above 13,000 ft^3/s (368 m^3/s) on basis of peak flow over downstream dams and contracted-opening measurements at gage heights 17.8 ft (5.42 m) and 21.15 ft (6.447 m); minimum, 24 ft^3/s (0.68 m^3/s) Sept. 14, 1913; minimum daily, 30 ft^3/s (0.85 m^3/s) Sept. 14, 1913.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 7,400 ft^3/s (210 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 17	1945	*11,400	323	10.37	3.161	Jan. 9	1630	ice jam		*11.84	3.609

Minimum discharge, 275 ft^3/s (7.79 m^3/s) July 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1170	1090	4430	1300	1900	720	2380	1230	681	518	358	402
2	3370	1040	3200	1300	1800	720	4200	1130	657	466	358	378
3	2070	1000	2600	1200	1700	700	2570	1090	888	442	359	352
4	1790	989	2300	1200	1700	700	2090	1050	934	436	616	325
5	1530	1090	2000	1100	1600	700	2650	1030	781	451	599	325
6	1420	1240	1700	1100	1700	700	2420	1010	716	425	469	318
7	1390	1090	1500	1000	1800	700	2400	976	661	405	618	311
8	1240	1120	1400	1000	1900	700	2160	946	1260	389	786	303
9	2630	1410	1250	6000	1800	700	1850	1140	1440	379	737	300
10	3980	1250	1200	4500	1800	700	1790	1580	1280	371	549	294
11	2190	1560	1300	3000	1500	720	1940	1220	970	378	467	326
12	1750	1370	1400	2700	1400	800	3150	1070	831	392	440	538
13	1540	1260	1600	2500	1300	900	3220	1000	769	354	491	507
14	1460	1230	2200	2400	1200	1100	3470	965	795	312	443	397
15	1790	1170	5500	2200	1100	1970	2350	995	733	345	409	367
16	1550	1390	3500	2100	1000	1260	1960	1190	670	353	390	362
17	6700	1570	2500	2000	940	1040	1750	1290	622	382	373	360
18	6430	2500	2020	1900	880	960	1640	1350	623	414	359	349
19	3500	1790	1820	1800	860	931	1810	1350	715	383	348	399
20	3860	1540	1660	1700	840	931	2110	1160	1000	357	340	468
21	2720	1470	1670	1600	780	1220	2420	1180	748	344	331	389
22	2250	1680	2030	1600	760	2590	1900	1130	724	344	322	376
23	1930	1500	1610	1500	760	1830	1840	1030	681	338	319	358
24	1710	1520	1500	1500	740	1740	1820	967	603	342	320	345
25	1590	1440	2510	1700	740	1440	1820	940	564	326	359	334
26	1500	2590	2480	9000	740	1390	1610	900	533	314	394	325
27	1430	2260	1650	5000	740	3160	1660	845	523	318	358	318
28	1350	1750	1430	3400	720	3060	1600	804	548	693	341	315
29	1240	1600	1330	2900	---	2260	1490	771	591	547	347	310
30	1180	1520	1500	2500	---	2040	1390	733	618	406	343	306
31	1130	---	1400	2000	---	1860	---	711	---	365	341	---
TOTAL	69390	44029	64190	74700	34700	40242	65460	32783	23159	12289	13284	10857
MEAN	2238	1468	2071	2410	1239	1298	2182	1058	772	396	429	362
MAX	6700	2590	5500	9000	1900	3160	4200	1580	1440	693	786	638
MIN	1130	989	1200	1000	720	700	1390	711	523	312	319	294
CFSM	4.39	2.88	4.06	4.73	2.43	2.55	4.28	2.08	1.51	.78	.84	.71
IN.	5.06	3.21	4.68	5.45	2.53	2.94	4.77	2.39	1.69	.90	.97	.79

CAL YR 1977 TOTAL 556419 MEAN 1524 MAX 27200 MIN 220 CFSM 2.99 IN 40.59
WTR YR 1978 TOTAL 485083 MEAN 1329 MAX 9000 MIN 294 CFSM 2.61 IN 35.38

Note.--No gage height record Jan. 22 to Mar. 3.

01335770 HUDSON RIVER AT WATERFORD, NY

LOCATION.--Lat 42°47'19", long 73°40'28", at Saratoga-Rensselaer County line, Hydrologic Unit 02020003, at bridge on U.S. Highway 4 in Waterford, 0.4 mi (0.6 km) upstream from first branch of Mohawk River, and 2.8 mi (4.5 km) downstream from dam at lock 1 of the Champlain (Barge) Canal.

DRAINAGE AREA.--4,620 mi² (11,966 km²).

PERIOD OF RECORD.--Water years 1975 to current year.
CHEMICAL DATA: 1975-76 (b), 1977 (c), 1978 (d).
MINOR ELEMENTS DATA: 1975-76 (c), 1977-78 (e).
PESTICIDE DATA: 1975 (b), 1976 (d), 1977-78 (e).
ORGANIC DATA: TOC--1975-77 (c), 1978 (d).
PCB--1975 (b), 1976 (d), 1977-78 (e).
PCN--1977 (e).
NUTRIENT DATA: 1975-76 (c), 1977-78 (e).
BIOLOGICAL DATA:
Coliforms--1977 (c), 1978 (d).
SEDIMENT DATA: 1975 (b), 1976-77 (e), 1978 (a).

PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT DISCHARGE: October 1976 to current year.

REMARKS.--During periods of ice effect, sediment samples collected from intake of Waterford water treatment plant (station 01335769). Water discharge estimated from staff gages located at upstream approach to lock 1 and 0.3 mi (0.5 km) upstream from lock 1 or by substracting the flow of the Mohawk River at Cohoes (station 01357500) from the flow of the Hudson River at Green Island (station 01358000). Water-stage recorder installed Feb. 24, 1978. Water-discharge records are poor. Streamflow affected by regulation for power generation and diversion for canal operations.

COOPERATION.--Staff-gage records for lock 1 furnished by the New York State Department of Transportation.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT CONCENTRATION: Maximum daily mean, 810 mg/L March 14, 1977; minimum daily mean, 1 Mg/L Dec. 27, 1976, March 2, 6, 1978.
SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 119,000 tons (108,000 Mg) March 14, 1977; minimum daily, 11 tons (10 Mg) Sept. 13, 1977.

EXTREMES FOR CURRENT YEAR.--
SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum daily mean, 186 mg/L March 28; minimum daily mean, 1 mg/L March 2, 6.
SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 11,600 tons (10,500 Mg) March 28; minimum daily, 13 tons (12 Mg) March 6.

WATER QUALITY DATA, OCTOBER 1976 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, CHEM-ICAL (LOW LEVEL) (MG/L)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L)
JAN , 1977										
26...	0900	E5600	151	6.6	.0	3.6	14.3	98	17	--
FEB										
23...	1400	E5000	148	6.8	.0	2.0	14.2	97	--	--
MAR										
24...	1330	E14500	148	7.0	2.0	8.2	14.2	100	--	--
APR										
21...	1230	E12800	100	6.2	10.0	2.0	10.8	96	15	--
MAY										
25...	0800	E7000	131	6.5	22.0	2.0	8.2	94	20	--
JUN										
16...	1200	E3100	155	6.1	20.5	3.0	9.2	105	9	--
JUL										
27...	1400	E2400	175	7.6	24.0	3.0	9.7	111	20	--
AUG										
15...	1400	E1700	175	7.3	23.5	1.0	9.4	111	15	--
SEP										
07...	1100	E7540	158	6.4	23.0	5.0	8.5	98	20	--
OCT										
26...	1630	E12600	112	6.1	10.0	4.0	11.7	108	15	--
NOV										
16...	1100	E14500	122	6.6	7.5	2.0	12.6	103	20	--
DEC										
15...	1200	E19400	130	6.0	.0	5.0	15.0	103	12	--
JAN , 1978										
27...	1130	E29000	117	6.0	.0	--	15.0	103	18	--
FEB										
16...	1200	E9120	120	7.6	.0	3.0	14.6	100	15	--
MAR										
22...	1215	14700	150	6.8	2.0	--	14.5	104	15	--
APR										
20...	0930	16000	96	6.6	5.5	4.0	12.0	96	10	--
MAY										
16...	1000	15200	76	6.4	12.0	5.0	10.8	100	20	--
JUN										
06...	0900	6460	152	6.7	20.0	3.0	9.3	100	--	--
26...	1430	1390	143	6.6	23.5	3.0	8.8	104	--	15
JUL										
26...	1030	2110	138	6.5	25.0	2.0	8.3	98	--	23
AUG										
24...	1130	2950	175	7.4	24.0	3.0	8.3	98	--	21

E Estimated.

01335770 HUDSON RIVER AT WATERFORD, NY--Continued

WATER QUALITY DATA, OCTOBER 1976 TO SEPTEMBER 1978

DATE	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	CALCIUM TOTAL RECOV-ERABLE (MG/L AS CA)	MAGNE-SIUM, TOTAL RECOV-ERABLE (MG/L AS MG)	SODIUM, TOTAL RECOV-ERABLE (MG/L AS NA)	POTAS-SIUM, TOTAL RECOV-ERABLE (MG/L AS K)	CAR-BONATE (MG/L AS CO3)	BICAR-BONATE (MG/L AS HCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
JAN , 1977 26...	2800	--	--	--	--	--	--	--	--
FEB 23...	K1200	15	2.1	5.9	.7	0	39	14	13
MAR 24...	1800	--	--	--	--	--	--	--	--
APR 21...	160000	--	--	--	--	--	--	--	--
MAY 25...	4600	15	2.6	4.3	.8	0	41	13	8.8
JUN 16...	K900	--	--	--	--	--	--	--	--
JUL 27...	2300	--	--	--	--	--	--	--	--
AUG 15...	K1800	--	--	--	--	0	54	14	13
SEP 07...	7600	--	--	--	--	--	--	--	--
OCT 26...	2900	--	--	--	--	--	--	--	--
NOV 16...	K80	--	--	--	--	--	--	--	--
DEC 15...	12600	--	--	--	--	--	--	--	--
JAN , 1978 27...	10500	--	--	--	--	--	--	--	--
FEB 16...	K1700	--	--	--	--	--	--	--	--
MAR 22...	K3200	--	--	--	--	0	39	19	8.5
APR 20...	3450	--	--	--	--	--	--	--	--
MAY 16...	K12500	--	--	--	--	0	27	9.3	4.6
JUN 06...	K7600	--	--	--	--	--	--	--	--
26...	2630	--	--	--	--	--	--	--	--
JUL 26...	520	--	--	--	--	--	--	--	--
AUG 24...	300	--	--	--	--	--	--	--	--

K Results based on colony count outside the acceptable range (non-ideal colony count).

01335770 HUDSON RIVER AT WATERFORD, NY--Continued

WATER QUALITY DATA, OCTOBER 1976 TO SEPTEMBER 1978

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)
JAN , 1977									
26...	102	3	.63	.27	1.1	.03	--	0	0
FEB									
23...	108	6	.83	.31	1.3	.03	--	0	0
MAR									
24...	92	20	.56	.36	1.2	.04	--	1	0
APR									
21...	64	5	.50	.26	1.1	.04	--	0	0
MAY									
25...	94	0	.45	.31	.87	.03	--	1	0
JUN									
16...	65	0	--	--	--	--	--	1	0
JUL									
27...	116	51	.55	.52	.97	.06	.01	1	0
AUG									
15...	103	4	.55	.63	.99	.07	.02	1	0
SEP									
07...	99	6	.48	.33	1.0	.05	.01	1	0
OCT									
26...	71	14	.26	.23	.63	.02	.01	1	0
NOV									
16...	78	23	.32	.28	.57	.03	.01	0	1
DEC									
15...	93	32	--	--	--	--	--	1	0
JAN , 1978									
27...	125	88	.81	.54	1.3	.12	.02	0	0
FEB									
16...	82	4	.60	.29	1.1	.01	.00	0	0
MAR									
22...	89	39	.92	.57	1.4	.07	.02	1	0
APR									
20...	55	5	.36	.21	.84	.02	.00	1	0
MAY									
16...	60	8	.42	.27	.80	.02	.00	0	0
JUN									
06...	97	14	.56	.29	1.2	.03	.01	1	0
26...	88	6	.64	.38	1.2	.04	--	2	0
JUL									
26...	93	1	.96	.95	1.5	.03	--	0	0
AUG									
24...	120	1	.29	.28	.73	.04	--	1	2

01335770 HUDSON RIVER AT WATERFORD, NY--Continued

WATER QUALITY DATA, OCTOBER 1976 TO SEPTEMBER 1978

DATE	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	OIL AND GREASE (MG/L)
JAN , 1977									
26...	<10	0	220	2	<.5	10	6.6	--	0
FEB									
23...	<10	0	240	2	<.5	10	8.3	--	0
MAR									
24...	<10	0	950	6	<.5	30	4.8	--	0
APR									
21...	10	0	270	2	<.5	10	3.4	--	0
MAY									
25...	10	5	370	5	.5	20	6.3	--	1
JUN									
16...	10	6	380	18	.2	0	--	--	--
JUL									
27...	<10	4	310	5	.0	10	7.2	--	2
AUG									
15...	<10	4	320	3	.0	10	6.1	--	--
SEP									
07...	<10	7	280	18	<.5	10	5.3	--	1
OCT									
26...	20	4	410	19	<.5	10	6.8	--	0
NOV									
16...	<10	4	330	0	<.5	10	13	--	0
DEC									
15...	20	6	1000	7	1.0	20	10	--	0
JAN , 1978									
27...	<10	11	3300	3	<.5	30	9.1	.00	1
FEB									
16...	20	3	250	2	<.5	10	6.6	.00	1
MAR									
22...	20	3	1700	6	<.5	20	9.6	.00	2
APR									
20...	<10	0	290	1	<.5	10	8.6	.00	3
MAY									
16...	<10	5	470	3	<.5	30	9.3	.00	0
JUN									
06...	10	12	790	3	<.5	40	9.4	.00	0
26...	<10	8	--	20	<.5	10	7.0	--	0
JUL									
26...	<10	6	300	4	<.5	20	6.4	--	0
AUG									
24...	<10	5	220	2	<.5	10	6.8	--	1

01335770 HUDSON RIVER AT WATERFORD, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SOLIDS, RESIDUE AT 105 DEG. C. SUS-PENDED (MG/L)	SOLIDS, VOLA-TILE, SUS-PENDED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)
OCT									
03...	1545	19500	46	5	.27	.53	.90	.08	1500
18...	1015	38000	133	8	.32	1.5	1.8	.16	5000
18...	1600	35600	115	6	.30	1.7	2.0	.11	4200
19...	1445	28800	36	0	.26	.41	.67	.06	1500
NOV									
09...	1400	13200	90	0	.27	.88	1.2	.05	1000
25...	1430	13300	5	5	.31	.29	.60	.03	300
DEC									
16...	1000	23700	46	9	.43	.61	1.0	.06	1900
JAN									
09...	1400	22500	117	12	.43	.74	1.2	.14	4000
MAR									
14...	1145	8310	6	2	.53	.82	1.4	.04	490
22...	1330	14700	40	4	.50	.82	1.3	.06	1300
28...	0730	23600	198	12	.51	1.0	1.5	.16	8400
29...	1000	19500	49	0	.51	.81	1.3	.07	2100
APR									
06...	0945	15100	9	0	.56	.58	1.1	.03	610
10...	0800	12400	4	0	.51	.54	1.1	.02	310
14...	1230	21300	29	10	.44	.27	.71	.04	1000
15...	1500	23100	21	7	.42	.51	.93	.03	920
16...	0845	19000	19	5	.47	.40	.87	.02	490
MAY									
02...	1030	14400	9	4	.47	.33	.80	.02	290
10...	0945	11800	5	0	.44	.83	1.3	.02	290
18...	1420	18300	8	0	.43	.53	.96	.03	490
JUN									
01...	1230	7180	8	0	.49	.67	1.2	.03	320
14...	1045	7380	8	0	.55	.56	1.1	.03	430
20...	1445	4770	26	14	.64	.52	1.2	.05	1600
26...	1415	1120	8	5	.84	.66	1.5	.02	330
JUL									
05...	0900	680	8	2	.00	.81	.81	.04	310
05...	1345	990	3	1	.79	.71	1.5	.03	270
10...	0915	940	16	0	.52	.32	.84	.03	180
10...	1500	1120	13	1	.48	.26	.74	.03	210
11...	0830	2690	--	--	.40	.50	.90	.05	240
16...	1545	2040	7	1	.42	.53	.95	.04	310
17...	0830	1160	11	5	.36	.46	.82	.03	200
17...	1945	1670	5	1	.43	.53	.96	.03	250
18...	0945	2150	10	5	.38	.53	.91	.04	300
AUG									
14...	1630	3210	6	0	.57	1.1	1.7	.04	250
31...	1500	3040	10	9	.59	.57	1.2	.03	220
SEP									
26...	1100	3020	3	2	.75	.65	1.4	.02	180

01335770 HUDSON RIVER AT WATERFORD, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	PCB, DIS-SOLVED (UG/L)	PCB, TOTAL (UG/L)	NAPH-THA-LENES, POLY-CHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR-DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)
OCT									
03...	5	60	--	.2	.00	.00	.0	.00	.00
18...	15	210	--	.8	.00	.00	.0	.00	.00
18...	10	160	--	.4	.00	.00	.0	.00	.00
19...	1	70	--	.8	.00	.00	.0	.00	.00
NOV									
09...	6	30	--	.4	.00	.00	.0	.00	.00
25...	5	20	--	.1	.00	.00	.0	.00	.00
DEC									
16...	13	60	--	.1	.00	.00	.0	.00	.00
JAN									
09...	9	130	--	.2	.00	.00	.0	.00	.00
MAR									
14...	16	30	--	.3	.00	.00	.0	.00	.00
22...	24	50	--	.3	.00	.00	.0	.00	.00
28...	69	200	--	.5	.00	.00	.0	.00	.00
29...	10	70	--	.2	.00	.00	.0	.00	.00
APR									
06...	17	20	--	.1	.00	.00	.0	.00	.00
10...	15	20	--	.1	.00	.00	.0	.00	.00
14...	22	20	--	.2	.00	.00	.0	.00	.00
15...	0	40	--	.6	.00	.00	.0	.00	.00
16...	10	30	--	.0	.00	.00	.0	.00	.00
MAY									
02...	9	20	--	.3	.00	.00	.0	.00	.00
10...	6	20	--	.4	.00	.00	.0	.00	.00
18...	1	30	--	.4	.00	.00	.0	.00	.00
JUN									
01...	3	30	--	.8	.00	.00	.0	.00	.00
14...	7	30	--	.4	.00	.00	.0	.00	.00
20...	16	60	--	.4	.00	.00	.0	.00	.00
26...	17	40	--	.3	.00	.00	.0	.00	.00
JUL									
05...	18	40	.5	.6	.00	.00	.0	.00	.00
05...	22	50	--	.4	.00	.00	.0	.00	.00
10...	19	40	--	.1	.00	.00	.0	.00	.00
10...	21	50	.4	.3	.00	.00	.0	.00	.00
11...	15	40	--	.4	.00	.00	.0	.00	.00
16...	3	60	--	.6	.00	.00	.0	.00	.00
17...	4	40	.3	.4	.00	.00	.0	.00	.00
17...	4	40	--	.5	.00	.00	.0	.00	.00
18...	4	40	--	.5	.00	.00	.0	.00	.00
AUG									
14...	9	40	--	.8	.00	.00	.0	.00	.00
31...	16	30	--	.7	.00	.00	.0	.00	.00
SEP									
26...	12	30	--	.2	.00	.00	.0	.00	.00

01335770 HUDSON RIVER AT WATERFORD, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	DDT, TOTAL (UG/L)	DI-ELDRIN TOTAL (UG/L)	ENDO-SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	HEPTA-CHLOR, TOTAL (UG/L)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	MIREX, TOTAL (UG/L)	TOX-APHENE, TOTAL (UG/L)
OCT									
03...	.00	.00	--	.00	.00	.00	.00	.00	0
18...	.00	.00	--	.00	.00	.00	.00	.00	0
18...	.00	.00	--	.00	.00	.00	.00	.00	0
19...	.00	.00	--	.00	.00	.00	.00	.00	0
NOV									
09...	.00	.00	--	.00	.00	.00	.00	.00	0
25...	.00	.00	--	.00	.00	.00	.00	.00	0
DEC									
16...	.00	.00	--	.00	.00	.00	.00	.00	0
JAN									
09...	.00	.00	--	.00	.00	.00	.00	.00	0
MAR									
14...	.00	.00	--	.00	.00	.00	.00	.00	0
22...	.00	.00	--	.00	.00	.00	.00	.00	0
28...	.00	.00	--	.00	.00	.00	.00	.00	0
29...	.00	.00	--	.00	.00	.00	.00	.00	0
APR									
06...	.00	.00	--	.00	.00	.00	.00	.00	0
10...	.00	.00	--	.00	.00	.00	.00	.00	0
14...	.00	.00	--	.00	.00	.00	.00	.00	0
15...	.00	.00	--	.00	.00	.00	.00	.00	0
16...	.00	.00	--	.00	.00	.00	.00	.00	0
MAY									
02...	.00	.00	--	.00	.00	.00	.00	.00	0
10...	.00	.00	--	.00	.00	.00	.00	.00	0
18...	.00	.00	--	.00	.00	.00	.00	.00	0
JUN									
01...	.00	.00	.00	.00	.00	.00	.00	.00	0
14...	.00	.00	.00	.00	.00	.00	.00	.00	0
20...	.00	.00	.00	.00	.00	.00	.00	.00	0
26...	.00	.00	.00	.00	.00	.00	.00	.00	0
JUL									
05...	.00	.00	.00	.00	.00	.00	.00	.00	0
05...	.00	.00	.00	.00	.00	.00	.00	.00	0
10...	.00	.00	.00	.00	.00	.00	.00	.00	0
10...	.00	.00	.00	.00	.00	.00	.00	.00	0
11...	.00	.00	.00	.00	.00	.00	.00	.00	0
16...	.00	.00	.00	.00	.00	.00	.00	.00	0
17...	.00	.00	.00	.00	.00	.00	.00	.00	0
17...	.00	.00	.00	.00	.00	.00	.00	.00	0
18...	.00	.00	.00	.00	.00	.00	.00	.00	0
AUG									
14...	.00	.00	.00	.00	.00	.00	.00	.00	0
31...	.00	.00	.00	.00	.00	.00	.00	.00	0
SEP									
26...	.00	.00	.00	.00	.00	.00	.00	.00	0

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM
MAR , 1978											
28...	1430	22600	153	9340	38	55	72	87	93	98	100

01335770 HUDSON RIVER AT WATERFORD, NY--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	11800	16	510	9180	11	273	17100	61	2820
2	17700	42	2010	9940	7	188	18800	68	3450
3	19000	48	2460	10100	8	218	16500	51	2270
4	17000	36	1650	9110	6	148	13700	22	814
5	15200	24	985	8870	7	168	13800	19	708
6	13500	20	729	9260	7	175	14300	25	965
7	12400	18	603	6800	7	129	14100	20	761
8	11500	15	466	11500	15	466	13700	9	333
9	11000	12	356	13500	14	510	14400	20	778
10	18300	45	2220	13300	17	610	13900	15	563
11	17200	34	1580	13700	15	555	12200	10	329
12	16000	20	864	14900	12	483	10500	4	113
13	14300	15	579	14300	11	425	10800	6	175
14	13700	14	518	11000	10	297	12700	19	652
15	14400	14	544	11700	8	253	19400	52	2720
16	14200	6	230	12400	15	502	23700	50	3200
17	21100	104	5920	13400	5	181	19800	35	1870
18	35400	120	11500	15500	23	963	18300	26	1280
19	30200	45	3670	14500	14	548	12800	45	1560
20	27200	25	1840	13700	8	296	16500	20	891
21	22500	21	1280	10500	7	198	13600	20	734
22	18800	12	609	11300	7	214	14400	20	778
23	17900	15	725	12300	5	166	13600	20	734
24	17100	10	462	13200	6	214	13100	15	531
25	15800	8	341	13100	9	318	14000	24	907
26	14500	10	391	15600	34	1430	17600	30	1430
27	13600	8	294	16700	40	1800	15100	23	938
28	13000	6	211	12900	30	1040	13100	9	318
29	11500	4	124	12300	9	299	12900	12	418
30	10100	7	191	11300	21	641	10900	9	265
31	7530	11	224	---	---	---	8900	5	120
TOTAL	513430	---	44086	365860	---	13708	454200	---	33425

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JANUARY			FEBRUARY			MARCH	
1	11300	10	305	15400	4	166	7720	4	83
2	8510	10	230	14200	3	115	7560	1	20
3	8640	8	187	12800	2	69	7610	2	41
4	10100	3	82	11400	8	246	7280	5	98
5	12400	5	167	10200	5	138	6700	5	90
6	11000	5	148	9160	5	124	4940	1	13
7	10500	10	283	8660	5	117	7900	4	85
8	10500	20	567	9430	5	127	8950	3	72
9	18800	138	7000	8660	8	187	7350	5	99
10	33100	65	5810	9140	7	173	7420	5	100
11	20400	33	1820	9440	11	280	7300	5	99
12	22900	45	2780	8540	10	231	5870	6	95
13	21300	40	2300	9610	5	130	5180	3	42
14	18600	25	1260	9860	12	319	7750	12	251
15	17500	20	945	8790	14	332	11300	18	549
16	16900	10	456	8290	6	134	11600	33	1030
17	14800	8	320	9320	12	302	9650	25	651
18	13900	10	375	8870	11	263	9400	14	355
19	14000	40	1510	8550	8	185	7910	8	171
20	12000	10	324	7850	4	85	5780	12	187
21	11700	11	347	6240	8	135	9410	25	635
22	11700	10	316	5940	7	112	14200	38	1460
23	11100	10	300	7590	10	205	14800	35	1400
24	12300	13	432	6510	11	193	15000	22	891
25	11700	6	190	7930	10	214	13400	17	615
26	21100	28	1600	6440	10	174	11000	10	297
27	30100	84	6830	4970	13	174	13400	122	4410
28	22700	35	2150	7270	4	79	23000	186	11600
29	18600	20	1000	---	---	---	17700	56	2680
30	17500	8	378	---	---	---	15500	25	1050
31	16500	8	356	---	---	---	14500	12	470
TOTAL	492150	---	40768	251060	---	5009	317080	---	29639

01335770 HUDSON RIVER AT WATERFORD, NY--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	14600	30	1180	15600	28	1180	6110	6	99
2	18100	45	2200	13300	19	682	6160	8	133
3	15600	32	1350	11100	7	210	7130	12	231
4	14400	20	778	9760	11	290	7670	15	311
5	14500	15	587	9280	10	251	5250	9	128
6	15200	14	575	9100	3	74	5820	14	220
7	14900	7	282	8570	4	93	5960	12	193
8	14700	5	198	8280	24	537	7290	15	295
9	13900	11	413	9580	22	569	10500	26	737
10	13100	4	141	13300	13	467	10800	27	787
11	12800	4	138	17000	24	1100	8570	19	440
12	14800	8	320	16400	28	1240	5860	13	206
13	19100	21	1080	15200	20	821	7030	11	209
14	21300	23	1320	14400	12	467	6660	7	126
15	21600	26	1520	14100	15	571	6510	11	193
16	18900	14	714	15000	8	324	5860	16	253
17	16400	7	310	15900	12	515	5530	9	134
18	15000	4	162	17500	15	709	4890	5	66
19	14900	4	161	17200	34	1580	3670	8	79
20	16200	8	350	15900	35	1500	5070	15	205
21	17800	6	288	13300	31	1110	5580	10	151
22	17500	5	236	10500	17	482	5960	10	161
23	16200	4	175	12000	7	227	4980	8	108
24	16300	4	176	11500	5	155	5160	3	42
25	16300	4	176	9890	4	107	4030	6	65
26	16200	4	175	9400	7	178	1920	5	26
27	16600	4	179	8570	14	324	3590	6	58
28	17100	4	185	7450	11	221	3870	7	73
29	17200	3	139	4760	7	90	3470	5	47
30	17100	9	416	4240	7	80	3550	19	182
31	---	---	---	5770	7	109	---	---	---
TOTAL	488300	---	15924	363950	---	16263	174450	---	5958

01335770 HUDSON RIVER AT WATERFORD, NY--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JULY			AUGUST			SEPTEMBER	
1	3280	5	44	3100	7	59	2980	6	48
2	2650	2	14	3040	8	66	2980	6	48
3	1640	5	22	3470	9	84	2740	20	148
4	2740	5	37	4670	11	139	1600	10	43
5	1470	7	28	5210	11	155	1300	8	28
6	2890	5	39	3140	9	76	2540	7	48
7	2620	5	35	3140	6	51	2600	4	28
8	2800	5	38	3990	7	75	2710	3	22
9	2330	6	38	4280	8	92	2620	5	35
10	1410	6	23	3710	7	70	2040	3	17
11	3140	8	68	3170	8	68	1410	5	19
12	2660	5	36	3320	22	197	4240	5	57
13	2300	6	37	3710	17	170	5630	8	122
14	2180	7	41	2950	10	80	4940	6	80
15	2650	6	43	3990	10	108	4670	12	151
16	2280	5	31	3470	10	94	4720	10	127
17	1720	4	19	3630	10	98	3630	18	176
18	3140	5	42	3440	8	74	2680	5	36
19	3550	10	96	3280	5	44	3630	9	88
20	3040	12	98	2080	6	34	3950	6	64
21	2770	7	52	1860	10	50	3320	3	27
22	2680	5	36	2890	10	78	3590	2	19
23	2620	5	35	2800	10	76	3320	8	72
24	1390	7	26	2740	10	74	2800	14	106
25	1860	4	20	2920	10	79	2330	11	69
26	2180	8	47	2860	10	77	2890	12	94
27	2380	12	77	2410	6	39	2710	7	51
28	3170	8	68	2010	10	54	2980	19	153
29	3750	6	61	2620	5	35	3590	20	194
30	3010	6	49	2830	8	61	2330	11	69
31	1950	14	74	3100	6	50	---	---	---
TOTAL	78270	---	1374	99830	---	2507	93470	---	2239

01336000 MOHAWK RIVER BELOW DELTA DAM, NEAR ROME, NY

LOCATION.--Lat 43°15'52", long 75°26'12", Oneida County, Hydrologic Unit 02020004, on right bank at Rome Fish Hatchery, 1.0 mi (1.6 km) downstream from Delta Dam, and 4.0 mi (6.4 km) north of Rome. Water-quality sampling site at discharge station.

DRAINAGE AREA.--150 mi² (389 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1921 to current year. Monthly discharge only for some periods, published in WSP 1302.

REVISED RECORDS.--WSP 851: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 474.00 ft (144.475 m) Barge Canal datum. Prior to Jan. 24, 1937, nonrecording gage at site 200 ft (61 m) downstream at same datum.

REMARKS.--Records good. During canal navigation season, water is diverted from Black River through Forestport feeder and Black River Canal (flowing south) into basin above Delta Reservoir (see station 04252000). Flow regulated by Delta Reservoir (usable capacity, 2,800 mil ft³ or 79.0 hm³) except for Oct. 1-28, Nov. 11 to Dec. 30, Apr. 20 to May 26, June 23-25, when reservoir spilled. Small quantity of water diverted from Delta Reservoir for fish hatchery use and later returned to river, part above and part below station.

AVERAGE DISCHARGE.--57 years, 380 ft³/s (10.76 m³/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,560 ft³/s (242 m³/s) Oct. 2, 1945, gage height, 11.18 ft (3.408 m); minimum, 30 ft³/s (0.85 m³/s) Sept. 27, 1945, gage height, 0.65 ft (0.198 m); minimum daily, 45 ft³/s (1.27 m³/s) Jan. 17, 1931.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,260 ft³/s (64.0 m³/s) Oct. 9, gage height, 6.00 ft (1.829 m); minimum, 183 ft³/s (5.18 m³/s) Mar. 11, 12, 14, gage height, 1.83 ft (0.558 m); minimum daily, 184 ft³/s (5.21 m³/s) Mar. 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	877	652	1030	856	958	193	284	442	226	221	224	261
2	1720	467	1580	851	948	193	277	366	226	221	224	260
3	1160	335	1070	851	948	193	251	320	226	220	225	254
4	793	348	764	846	943	190	250	413	226	218	226	254
5	548	344	583	842	928	190	299	367	226	218	226	248
6	402	344	509	842	923	190	264	346	234	218	225	240
7	323	358	452	837	913	190	276	348	225	217	224	240
8	269	385	385	837	903	190	474	337	226	216	224	238
9	1190	358	368	865	898	190	827	968	226	216	225	238
10	1760	361	445	865	884	188	827	1180	224	216	226	240
11	995	607	431	874	874	186	853	775	221	216	224	242
12	645	677	358	870	865	184	880	535	220	216	224	243
13	473	591	442	865	856	186	874	416	219	216	222	249
14	367	467	665	860	846	185	860	342	218	218	221	245
15	399	385	1270	856	837	191	850	333	216	218	220	245
16	443	385	1180	856	832	195	847	415	216	218	219	248
17	764	463	884	851	512	195	771	375	216	216	219	246
18	801	583	669	846	200	194	708	364	226	217	218	246
19	575	611	551	842	200	192	711	388	232	220	302	289
20	427	567	467	918	198	194	419	347	226	218	264	256
21	333	665	442	983	198	199	721	376	275	218	264	253
22	289	1270	417	978	198	228	796	353	259	219	264	249
23	254	894	486	968	198	234	821	301	235	218	263	245
24	315	908	442	963	198	232	844	262	230	216	263	245
25	301	828	364	953	195	224	855	240	224	216	264	248
26	252	725	516	983	195	217	849	230	221	216	264	265
27	222	607	497	1000	195	249	793	224	221	223	264	296
28	438	509	395	988	195	255	716	224	222	236	261	296
29	656	445	329	983	---	248	632	226	221	228	262	296
30	656	402	520	973	---	244	548	224	221	226	261	296
31	656	---	856	963	---	247	---	225	---	226	261	---
TOTAL	19303	16541	19367	27865	17038	6385	19377	12272	6806	6792	7473	7731
MEAN	623	551	625	899	609	206	646	396	227	219	241	258
MAX	1760	1270	1580	1000	958	255	880	1180	275	236	302	296
MIN	222	335	329	837	195	184	250	224	216	216	218	238

CAL YR 1977 TOTAL 165323 MEAN 453 MAX 2900 MIN 167 MEAN * 473 CFSM * 3.15 IN * 42.76
WTR YR 1978 TOTAL 166951 MEAN 457 MAX 1760 MIN 184 MEAN * 424 CFSM * 2.83 IN * 38.34

* Adjusted for change in contents in Delta Reservoir and diversion from Black River basin.

01336000 MOHAWK RIVER BELOW DELTA DAM, NEAR ROME, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1961-62, 1964-72, 1974 to March 1978 (discontinued).
CHEMICAL DATA: 1955 and 1963, unpublished (a), 1964 (a).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1960 to September 1962, October 1963 to December 1965, September 1966 to September 1972, April 1974 to March 1978 (discontinued).

INSTRUMENTATION.--Temperature recorder since September 1966.

REMARKS.--Prior to May 1964, once-daily water-temperature measurements were made at Delta Dam, 1 mile (1.6 km) upstream from present site. Temperature recorder clock stopped Nov. 3-30 (range in temperature 0.5 to 5.5°C), Jan. 3-10 (range in temperature 0.5 to 1.0°C), and Feb. 21 to Mar. 10 (range in temperature 1.0 to 3.0°C).

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 24.5°C June 23, 24, 1976; minimum (water years 1961-62, 1965, 1967-72, 1975-78), freezing point on many days during winter periods in water years 1961-62, 1967, 1971-72, and 1977.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	15.0	14.5	5.0	4.5	5.0	5.0	1.0	1.0	1.0	1.0	---	---
2	14.5	14.5	5.5	5.0	5.0	5.0	1.0	1.0	1.0	1.0	---	---
3	14.5	14.0	---	---	5.0	4.5	---	---	1.0	.5	---	---
4	14.0	13.5	---	---	4.5	4.0	---	---	.5	.5	---	---
5	14.0	13.5	---	---	4.0	3.0	---	---	.5	.5	---	---
6	14.0	13.5	---	---	3.5	3.0	---	---	.5	.5	---	---
7	14.0	13.0	---	---	3.5	2.5	---	---	.5	.5	---	---
8	13.0	13.0	---	---	2.5	2.0	---	---	.5	.5	---	---
9	13.0	12.5	---	---	2.5	2.0	---	---	1.0	.5	---	---
10	12.5	12.0	---	---	2.0	1.0	---	---	1.0	1.0	---	---
11	12.0	11.5	---	---	1.5	1.0	1.0	1.0	1.0	1.0	2.5	1.5
12	11.5	11.5	---	---	1.0	1.0	1.0	1.0	1.0	1.0	2.5	1.5
13	11.5	10.5	---	---	1.0	1.0	1.0	1.0	1.0	1.0	2.5	1.5
14	10.5	10.5	---	---	1.5	1.0	1.0	1.0	1.0	1.0	1.5	1.5
15	10.5	10.0	---	---	1.0	1.0	1.0	.5	1.0	.5	2.0	1.5
16	10.0	10.0	---	---	1.0	1.0	.5	.5	1.0	.5	2.0	1.5
17	10.0	9.0	---	---	1.0	1.0	.5	.5	1.0	.5	2.5	1.0
18	9.0	8.5	---	---	1.0	1.0	.5	.5	1.0	.5	1.5	1.0
19	8.5	8.0	---	---	1.0	1.0	.5	.5	1.5	.5	1.5	1.0
20	8.5	8.0	---	---	1.0	1.0	.5	.5	1.5	1.0	2.5	1.0
21	8.0	7.5	---	---	1.0	1.0	.5	.5	---	---	1.0	.5
22	7.5	6.5	---	---	1.5	1.0	.5	.5	---	---	1.0	.5
23	7.5	6.5	---	---	1.5	1.0	.5	.5	---	---	1.0	.5
24	7.0	6.5	---	---	1.5	1.0	.5	.5	---	---	1.5	.5
25	6.5	6.5	---	---	1.0	.5	.5	.5	---	---	1.5	.0
26	6.5	6.0	---	---	.5	.5	.5	.5	---	---	.5	.0
27	7.0	6.5	---	---	1.0	.5	.5	.5	---	---	1.0	.5
28	7.0	6.0	---	---	1.0	.5	.5	.5	---	---	1.0	.5
29	6.0	5.0	---	---	1.5	1.0	1.0	.5	---	---	1.0	.5
30	5.5	5.0	---	---	1.5	1.0	1.0	1.0	---	---	2.0	.5
31	5.5	5.0	---	---	1.5	1.0	1.0	1.0	---	---	1.0	.5
MONTH	15.0	5.0	5.5	4.5	5.0	.5	1.0	.5	1.5	.5	2.5	.0

01346000 WEST CANADA CREEK AT KAST BRIDGE, NY

LOCATION.--Lat 43°04'08", long 74°59'26", Herkimer County, Hydrologic Unit 02020004, on left bank 600 ft (183 m) downstream from bridge on old State Highway 28 at Kast Bridge, 1.2 mi (1.9 km) downstream from North Creek, 2.2 mi (3.5 km) north of Herkimer, and 4.0 mi (6.4 km) upstream from mouth.

DRAINAGE AREA.--556 mi² (1,440 km²).

PERIOD OF RECORD.--May 1905 to December 1906 (gage height and discharge measurements only), January 1907, April to December 1907, March 1908 to December 1909, April 1910 to December 1913, April to December 1914, April 1915 to January 1917, April to November 1917, April to June 1918, October 1920 to current year. Monthly discharge only for some periods, published in WSP 1302.

GAGE.--Water-stage recorder. Datum of gage is 438.99 ft (133.804 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 18, 1920, nonrecording gage at former highway bridge 500 ft (152 m) upstream at different datum.

REMARKS.--Records good except those for winter periods, which are poor. Since March 1914, flow regulated by Hinckley Reservoir, 31 mi (50 km) above station (usable capacity, 3,320 mil ft³ or 94.0 hm³). During this year flow regulated except for Oct. 1-28, Nov. 25-30, Dec. 2-22, May 11-30, when reservoir spilled. Diurnal fluctuation at low and medium flow caused by powerplants above station. Diversion at Trenton Falls, 26 mi (42 km) above station, by Ninemile feeder since 1915 during canal navigation season. Diversion from Hinckley Reservoir for Utica water supply returned to Mohawk River.

AVERAGE DISCHARGE.--58 years (1920-78), 1,320 ft³/s (37.38 m³/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 23,300 ft³/s (660 m³/s) Mar. 26, 1913, from reports of State Engineer and Surveyor; maximum gage height, 10.47 ft (3.191 m) probably Feb. 17, 1943, from floodmark in gage well (ice jam); minimum discharge, 20 ft³/s (0.57 m³/s) Sept. 3, 1929, gage height, 0.90 ft (0.274 m); minimum daily, 59 ft³/s (1.67 m³/s) Sept. 2, 1929.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 7,340 ft³/s (208 m³/s) Oct. 1, gage height, 5.26 ft (1.603 m); minimum, 77 ft³/s (2.18 m³/s) Sept. 7, gage height, 1.78 ft (0.460 m); minimum daily, 239 ft³/s (6.77 m³/s) Sept. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3800	1560	3640	1330	1550	1070	4230	2910	849	608	477	362
2	6500	1570	3170	1320	1530	883	3620	2680	1000	531	457	370
3	5700	1560	2500	1330	1580	954	2460	2240	1040	524	597	345
4	3870	1690	2390	1330	1520	804	2430	2030	748	477	671	324
5	2830	1720	2060	1320	1490	710	4330	1930	827	505	461	353
6	2180	1390	1610	1300	1260	865	3040	1990	904	572	385	303
7	1400	1470	1470	1300	1490	958	3360	1920	903	602	458	239
8	1480	2440	1380	1200	1350	1090	2960	1950	784	525	514	296
9	3110	2460	1240	3190	1320	1320	2550	3020	912	463	476	296
10	4880	2180	1140	2180	1360	872	2580	3700	853	496	606	296
11	4350	3700	853	1800	1360	936	3320	2460	682	569	475	405
12	3170	1960	1050	1860	1360	846	4230	3050	651	505	568	2060
13	2300	1670	1390	1790	1290	895	3820	2930	800	478	438	851
14	2110	1520	2790	1720	1320	994	3650	2630	697	525	412	551
15	2310	1560	3730	1720	1270	1320	3090	2270	717	504	429	570
16	2170	1570	2870	1600	1330	1130	2970	2220	551	483	426	605
17	4630	1680	2510	1680	1350	1130	2890	2220	608	559	446	552
18	4520	1640	2180	1530	1320	1020	2540	1970	915	524	379	554
19	3920	1810	1740	1540	1220	890	2610	1910	985	530	361	1310
20	2880	1910	1420	1600	1230	844	2760	1840	771	459	427	726
21	2230	2360	1680	1610	1270	1200	2830	1820	915	405	394	588
22	1880	2360	1650	1640	1220	2480	2760	1570	1550	451	392	545
23	1510	1980	1470	1490	1240	2400	2810	1810	792	459	398	530
24	1480	2160	1550	1660	1180	2680	2910	1450	733	471	411	474
25	1220	2020	1690	1780	1140	2230	2960	1090	680	406	397	470
26	1460	2350	1670	3120	955	2100	2940	1020	668	380	379	570
27	1240	2400	1550	2600	1210	3280	3070	874	723	617	310	532
28	1130	1710	1420	2180	1160	3320	3070	920	692	852	296	539
29	1590	1780	1270	1890	---	2750	3080	826	562	580	370	506
30	1580	1740	1330	1620	---	2460	3060	992	602	465	362	492
31	1590	---	1360	1640	---	2680	---	969	---	498	396	---
TOTAL	85020	58120	57773	53860	36875	47131	92930	61211	24114	16023	13568	16614
MEAN	2743	1937	1864	1737	1317	1520	3098	1975	804	517	438	554
MAX	6500	3700	3730	3190	1580	3320	4330	3700	1550	852	671	2060
MIN	1130	1390	853	1200	955	710	2430	826	551	380	296	239

CAL YR 1977 TOTAL 626222 MEAN 1721 MAX 13000 MIN 300
WTR YR 1978 TOTAL 563239 MEAN 1543 MAX 6500 MIN 239

01347000 MOHAWK RIVER NEAR LITTLE FALLS, NY

LOCATION.--Lat 43°00'52", long 74°46'48", Herkimer County, Hydrologic Unit 02020004, on left bank 1,800 ft (549 m) downstream from Rocky Rift Dam, 2.1 mi (3.4 km) upstream from East Canada Creek, and 4.5 mi (7.2 km) southeast of city of Little Falls.

DRAINAGE AREA.--1,348 mi² (3,491 km²).

PERIOD OF RECORD.--October 1927 to current year.

REVISED RECORDS.--WSP 741: 1929(M), Drainage area. WSP 1302: 1901, 1932(M). WSP 1432: 1928-30.

GAGE.--Water-stage recorder. Datum of gage is 308.84 ft (94.134 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Record fair. Records of daily discharge do not include diversion at Rocky Rift Dam into Erie (Barge) Canal for lockages at lock 16, near St. Johnsville. Monthly and annual figures of diversion at Rocky Rift Dam are published separately below. During canal navigation season, water is received from Black River basin through Black River Canal flowing south (see station 04252000), and from Chenango River basin through Oriskany Creek feeder. Water is diverted into (or may occasionally be received from) Oswego River basin through summit level of Erie (Barge) Canal between New London and Utica. Diurnal fluctuation caused by powerplants and locks and dams on Erie (Barge) Canal. Regulation by Delta and Hinckley Reservoirs (combined usable capacity, 6,120 mil ft³ or 173 hm³) (see Reservoirs in Hudson River Basin).

AVERAGE DISCHARGE.--51 years, 2,809 ft³/s (79.55 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge (river channel only), 33,100 ft³/s (937 m³/s) Mar. 14, 1977, gage height, 19.17 ft (5.843 m), from high-water mark in gage house; minimum (river channel only), 214 ft³/s (6.06 m³/s) Aug. 18, 1949, gage height, 3.75 ft (1.43 m); minimum daily (including canal), probably not less than 463 ft³/s (13.1 m³/s) Sept. 2, 1934.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 16,000 ft³/s (450 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 1	2145	17,100	484	13.89	4.234	Oct. 17	1130	*18,300	518	*14.34	4.371

Minimum discharge (river channel only), 573 ft³/s (16.23 m³/s) July 25, Aug. 15, 16, Sept. 7, 9, 21, gage height, 4.60 ft (1.402 m); minimum daily (river channel only), 704 ft³/s (19.9 m³/s) Aug. 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7180	2910	7060	3210	4330	2080	5270	3440	1490	1190	985	912
2	13000	2870	9070	3100	4130	1790	11600	3660	1550	1060	978	886
3	11600	2640	8200	3170	4110	1740	9570	3090	2330	978	1030	855
4	9170	2660	7100	3040	3620	1610	7890	3150	1820	1050	1440	788
5	6100	3230	5270	3120	3510	1500	11300	2710	1580	964	1200	748
6	4330	2770	3620	3230	3340	1680	9550	2910	1620	1010	985	794
7	3340	2770	3560	3040	3460	1920	9760	2850	1870	1030	873	721
8	2750	5970	3540	2910	3490	1700	8670	2850	2140	1080	1260	743
9	6280	7500	3500	7340	3340	1670	7000	3960	2470	880	1260	737
10	10300	5310	2810	7260	3260	1660	6500	7050	2050	931	1410	743
11	9800	11000	2700	6710	3170	1730	7220	5290	1540	1090	1310	760
12	7840	7880	2440	5360	3280	1620	9910	4400	1400	1010	1190	2630
13	5090	6140	3620	4680	3100	1830	9440	4140	1540	918	1030	2220
14	4130	4140	4460	4240	3070	2210	8670	3960	1620	992	892	1180
15	5340	3630	9460	3800	2980	3880	6870	3210	1480	999	899	1060
16	5340	3710	9400	3470	2880	4400	6020	3060	1230	978	836	1190
17	14000	3710	9110	3440	3060	3540	5700	3430	1140	1010	938	1260
18	11200	4500	7630	3430	2710	3150	4640	3070	1250	1100	806	1060
19	10800	4500	5620	3540	2240	2740	3870	3000	2130	992	892	3040
20	7880	4500	4150	3370	2140	2640	4740	2810	1760	905	931	3570
21	4860	4790	4040	3400	2190	3180	5330	2680	1550	830	867	1570
22	3930	6940	3990	3540	2010	8490	5270	2630	3000	880	938	1370
23	3380	5850	3660	3430	2110	9170	5020	2630	2050	958	918	1170
24	2810	5400	3650	3380	2130	9840	4900	2200	1530	905	886	1040
25	2770	5040	3880	3650	2100	8380	4880	1840	1360	842	944	938
26	2850	5360	4330	6280	2030	6730	4650	1590	1220	836	899	1060
27	2520	5920	3770	9110	1900	8470	4790	1500	1240	944	861	964
28	2230	4310	3430	7980	2070	10100	4760	1550	1450	2270	704	978
29	2870	3910	3060	6890	---	9740	4640	1470	1260	1590	880	1010
30	3000	3800	2840	5510	---	8930	4490	1540	1180	1100	899	978
31	2970	---	3030	4820	---	8870	---	1600	---	985	912	---
TOTAL	189660	143660	152000	139450	81760	136990	202920	93270	49850	32307	30853	36975
MEAN	6118	4789	4903	4498	2920	4419	6764	3009	1662	1042	995	1233
MAX	14000	11000	9460	9110	4330	10100	11600	7050	3000	2270	1440	3570
MIN	2230	2640	2440	2910	1900	1500	3870	1470	1140	830	704	721
†	13	9.3	.6	0	0	0	.7	17.1	20.1	22.2	22.2	23.7

CAL YR 1977 TOTAL 1408263 MEAN 3858 MAX 29900 MIN 456 † 11.8
WTR YR 1978 TOTAL 1289695 MEAN 3533 MAX 14000 MIN 704 † 10.9

† Diversion, equivalent in cubic feet per second, at Rocky Rift Dam into Erie (Barge) Canal for lockages at Lock 16.

01348000 EAST CANADA CREEK AT EAST CREEK, NY

LOCATION.--Lat 43°01'00", long 74°44'28", Herkimer County, Hydrologic Unit 0202004, on right bank at village of East Creek, 0.2 mi (0.3 km) downstream from Niagara Mohawk Power Corp. Beardslee powerplant, 1.2 mi (1.9 km) upstream from mouth, and 3.5 mi (5.6 km) northwest of St. Johnsville.

DRAINAGE AREA.--291 mi² (754 km²).

PERIOD OF RECORD.--December 1945 to current year.

GAGE.--Water-stage recorder. Datum of gage is 335.70 ft (102.321 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Extensive diurnal fluctuation and slight regulation caused by powerplants above station. City of Little Falls diverts about 5 ft³/s (0.14 m³/s) for municipal supply.

AVERAGE DISCHARGE.--32 years (1947-78), 683 ft³/s (19.34 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,300 ft³/s (377 m³/s) Mar. 14, 1977, gage height, 7.42 ft (2.262 m); minimum, 0.05 ft³/s (0.001 m³/s) July 9, 1978, gage height 0.47 ft (0.143 m); minimum gage height, 0.44 ft (0.134 m) July 29, 1977; minimum daily, 0.22 ft³/s (0.006 m³/s) July 9, 1978.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 2, 1945, reached a stage of 9.0 ft (2.74 m), from floodmarks (discharge, 24,000 ft³/s or 680 m³/s, from slope-area measurement of peak flow).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,800 ft³/s (193 m³/s) Apr. 14, gage height, 5.84 ft (1.780 m), no peak above base of 7,000 ft³/s (200 m³/s); minimum, 0.05 ft³/s (0.001 m³/s) July 9, gage height, 0.47 ft (0.143 m); minimum daily, 0.22 ft³/s (0.006 m³/s) July 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1550	650	1300	458	865	543	1510	1940	184	5.0	80	80
2	4880	884	2360	363	647	252	2210	1370	253	38	468	69
3	2790	54	1820	398	793	620	1980	1150	753	761	443	80
4	1840	3.0	1450	404	775	386	1580	1070	284	704	443	48
5	1400	16	1110	429	749	155	2150	1070	680	163	65	89
6	1090	650	902	429	740	275	2240	876	720	.62	14	80
7	931	1000	865	455	723	325	2200	858	561	.53	323	71
8	784	922	820	404	674	335	2120	886	858	.46	298	52
9	960	893	802	1010	584	217	1700	1910	1230	.22	15	47
10	2920	1050	793	2670	517	204	1680	2460	1030	.62	284	50
11	1920	2090	766	2530	416	304	1600	1580	720	71	414	110
12	1460	1710	592	1750	330	82	3470	1010	778	12	213	1650
13	1180	1260	732	1270	416	341	4300	1000	668	12	152	1520
14	960	1060	599	1030	435	416	4970	876	420	12	506	720
15	1080	784	1370	931	423	517	2870	589	481	12	229	704
16	1460	758	2180	606	294	715	2140	982	481	12	15	547
17	2360	766	1630	564	496	564	1910	895	184	75	15	18
18	2760	941	1200	570	368	398	1870	1200	380	110	15	493
19	1860	1130	1000	530	196	517	2440	1100	840	437	15	895
20	1380	1040	874	557	423	550	3020	982	280	262	15	933
21	1180	950	847	462	570	270	3130	770	1.5	92	15	704
22	931	1560	836	482	802	1050	2440	822	787	87	102	680
23	793	1390	829	503	346	921	2260	796	942	65	102	18
24	715	1320	570	536	352	1180	2440	728	481	73	163	18
25	723	1290	592	613	489	990	2750	375	50	82	71	194
26	715	1290	698	1010	166	838	3000	152	972	82	41	132
27	299	1290	856	1940	247	1190	2980	145	770	82	41	258
28	2.5	1130	674	2070	758	2010	2890	20	138	450	47	105
29	3.0	941	635	1590	---	2130	2730	19	.81	237	69	145
30	275	829	482	1190	---	1820	2380	202	.71	77	69	71
31	177	---	435	970	---	1480	---	280	---	80	119	---
TOTAL	41378.5	29671.0	30621	28734	14794	21595	74960	28113	15946.02	4095.45	4861	10581
MEAN	1335	989	988	927	528	697	2493	907	532	132	157	353
MAX	4880	2090	2360	2670	865	2130	4970	2460	1230	761	506	1650
MIN	2.5	3.0	435	363	166	82	1510	19	.71	.22	14	18

CAL YR 1977 TOTAL 312450.01 MEAN 856 MAX 11800 MIN .43
WTR YR 1978 TOTAL 305351.97 MEAN 837 MAX 4970 MIN .22

01349000 OTSQUAGO CREEK AT FORT PLAIN, NY

LOCATION.--Lat 42°55'46", long 74°37'35", Montgomery County, Hydrologic Unit 02020004, on left bank 25 ft (8 m) downstream from bridge on State Highway 163 in Fort Plain, and 0.5 mi (0.8 km) upstream from mouth.

DRAINAGE AREA.--59.2 mi² (153 km²).

PERIOD OF RECORD.--October 1949 to current year.

GAGE.--Water-stage recorder. Datum of gage is 302.16 ft (92.098 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1973, at datum 1.00 ft (0.305 m) higher.

REMARKS.--Records good except those for winter periods, which are poor. Occasional diurnal fluctuation at low flow.

AVERAGE DISCHARGE.--29 years, 86.8 ft³/s (2.458 m³/s), 19.91 in.yr (506 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,640 ft³/s (273 m³/s) July 3, 1974, gage height, 9.67 ft (2.947 m), from rating curve extended above 6,000 ft³/s (170 m³/s) on basis of slope-area measurement at gage height 9.24 ft (2.816 m); minimum, 0.6 ft³/s (0.017 m³/s) Nov. 30, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,000 ft³/s (57 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 1	2015	5,550	157	7.82	2.384	Mar. 27	1630	2,220	62.9	5.55	1.692
Oct. 17	0745	*5,980	169	*8.04	2.451	Apr. 1	1900	3,200	90.6	6.36	1.939
Nov. 8	2145	4,650	132	7.32	2.231	Apr. 5	0315	2,620	74.2	5.90	1.798

Minimum daily discharge, 4.0 ft³/s (0.11 m³/s) Sept. 8; minimum gage height, 1.25 ft (0.381 m) Sept. 7-9, 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1210	54	919	72	90	28	1800	33	34	12	7.5	14
2	687	52	661	62	70	28	972	32	17	9.8	7.0	5.4
3	246	50	389	58	62	27	285	29	35	9.8	7.2	4.9
4	181	56	262	54	58	27	365	27	25	12	15	5.3
5	127	70	150	54	54	27	1460	27	18	12	9.5	4.7
6	100	120	120	60	54	27	618	36	16	9.8	8.6	4.4
7	110	186	110	70	52	27	588	31	59	9.1	12	4.2
8	110	1440	96	90	52	28	386	27	297	8.4	27	4.0
9	380	831	92	637	49	28	236	48	244	7.8	14	4.1
10	252	347	90	447	48	30	249	52	80	7.8	23	4.2
11	130	899	90	240	46	35	474	32	40	7.5	13	14
12	110	232	100	180	45	40	708	27	28	6.9	10	17
13	110	166	120	140	40	46	435	25	29	6.6	8.9	14
14	120	128	150	110	39	240	255	24	28	8.9	7.5	13
15	666	120	218	100	38	708	148	36	21	9.5	6.6	13
16	245	126	200	90	37	377	130	40	18	8.3	6.6	15
17	2340	177	131	86	36	184	120	171	16	9.3	6.5	6.7
18	418	205	96	82	36	142	113	83	22	7.5	6.1	28
19	240	127	92	82	35	130	122	95	32	6.3	6.0	36
20	216	120	75	82	35	151	221	48	21	6.0	6.4	20
21	152	161	100	100	35	255	207	43	42	5.6	6.0	16
22	120	185	101	120	35	1250	117	33	130	5.1	5.6	9.6
23	110	114	92	150	33	1020	89	28	27	5.7	13	15
24	100	160	87	320	32	735	75	24	19	5.1	13	14
25	92	113	128	339	31	288	67	23	17	4.7	14	13
26	84	170	124	848	30	205	58	20	15	4.7	14	13
27	76	176	110	678	29	1170	53	18	15	6.5	5.6	13
28	70	161	92	407	29	1080	46	17	14	18	13	13
29	66	134	88	230	---	867	40	16	13	8.7	5.9	13
30	62	137	86	150	---	624	36	15	12	8.0	13	13
31	58	---	80	120	---	554	---	14	---	6.9	6.1	---
TOTAL	8988	7017	5249	6258	1230	10378	10473	1174	1384	254.3	317.6	364.5
MEAN	290	234	169	202	43.9	335	349	37.9	46.1	8.20	10.2	12.2
MAX	2340	1440	919	848	90	1250	1800	171	297	18	27	36
MIN	58	50	75	54	29	27	36	14	12	4.7	5.6	4.0
CFSM	4.90	3.95	2.86	3.41	.74	5.66	5.90	.64	.78	.14	.17	.21
IN.	5.65	4.41	3.30	3.93	.77	6.52	6.58	.74	.87	.16	.20	.23

CAL YR 1977 TOTAL 56987.1 MEAN 156 MAX 2880 MIN 4.2 CFSM 2.64 IN 35.81
WTR YR 1978 TOTAL 53087.4 MEAN 145 MAX 2340 MIN 4.0 CFSM 2.45 IN 33.36

01350000 SCHOHARIE CREEK AT PRATTSVILLE, NY

LOCATION.--Lat 42°19'15", long 74°26'10", Greene County, Hydrologic Unit 02020005, on left bank 100 ft (30 m) upstream from bridge on State Highway 23 in Prattsville, 0.2 mi (0.3 km) upstream from Schoharie Reservoir, 0.2 mi (0.3 km) downstream from Huntersfield, and 1.6 mi (2.6 km) downstream from Batavia Kill.

DRAINAGE AREA.--236 mi^2 (611 km^2).

PERIOD OF RECORD.--November 1902 to current year. Monthly discharge only for some periods, published in WSP 1302.

REVISED RECORDS.--WSP 351: Drainage area. WSP 1432: 1937-38.

GAGE.--Water-stage recorder. Datum of gage is 1,131.57 ft (344.902 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1915, nonrecording gage, and Oct. 1, 1915 to July 17, 1936, water-stage recorder, at old highway bridge 80 ft (24 m) upstream, and July 18, 1936 to July 15, 1954, water-stage recorder at site 0.2 mi (0.3 km) downstream, all at datum 1.56 ft (0.475 m) lower than present datum.

REMARKS.--Records good except those for winter periods, which are poor.

AVERAGE DISCHARGE.--75 years, 462 ft^3/s (13.08 m^3/s), 26.58 in/yr (675 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 55,200 ft^3/s (1,560 m^3/s) Oct. 16, 1955, gage height, 19.14 ft (5.834 m), from rating curve extended above 16,000 ft^3/s (453 m^3/s) on basis of contracted-opening measurement of peak flow; maximum gage height, 19.50 ft (5.944 m) Jan. 26, 1978 (ice jam); minimum daily discharge, 4.8 ft^3/s (0.14 m^3/s) Sept. 22, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,400 ft^3/s (120 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 17	0945	18,200	515	11.42	3.481	Jan. 26	0815	ice jam		*19.50	5.944
Nov. 8	2100	30,400	861	14.09	4.295	Mar. 27	1715	6,270	178	7.79	2.374
Dec. 10	0445	ice jam		7.24	2.207	Apr. 1	2345	4,740	134	7.10	2.164
Dec. 14	2015	ice jam		9.54	2.908	May 17	0015	5,310	150	7.37	2.246
Jan. 9	0945	*33,700	954	14.71	4.484						

Minimum discharge, 26 ft^3/s (0.74 m^3/s) Sept. 15, 17, gage height, 2.47 ft (0.753 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1050	354	2380	700	1100	250	2250	476	517	68	37	179
2	2500	329	2260	660	900	250	3100	420	368	62	37	110
3	1300	304	1590	620	800	250	1670	378	368	55	34	81
4	1110	290	1270	580	720	240	1300	344	470	916	46	68
5	821	359	1050	560	640	240	1910	348	373	618	50	59
6	711	369	1000	560	600	240	1570	389	320	325	223	51
7	608	380	853	580	560	240	1650	353	280	230	315	48
8	506	8390	820	2000	520	240	1540	329	765	179	950	42
9	1140	8530	780	13000	500	240	1160	442	624	150	353	37
10	1260	3230	720	4990	460	240	1020	693	436	147	234	33
11	845	3800	700	3500	440	250	1160	487	329	169	166	33
12	688	2160	720	2200	420	270	2160	415	275	126	135	33
13	580	1640	800	1800	400	300	1960	378	284	108	124	31
14	566	1320	1500	1600	380	500	1880	373	302	97	110	29
15	1230	1130	3530	1400	370	1200	1260	2770	234	102	97	28
16	1010	1030	1890	1200	350	800	967	2730	197	95	88	28
17	11700	952	1440	1100	340	500	811	3770	173	90	79	29
18	4360	1130	1160	1000	330	450	714	2240	163	95	70	31
19	2480	877	1040	940	310	450	707	1750	288	83	64	598
20	2170	758	911	880	300	500	1420	1200	200	73	59	302
21	1570	696	942	840	290	1000	1280	1080	163	64	48	179
22	1250	651	1080	800	290	2500	924	835	246	59	40	144
23	1040	587	800	800	280	1700	780	686	186	53	36	126
24	886	559	740	1000	270	1300	707	624	144	53	39	108
25	774	519	1540	2500	270	1160	658	835	118	45	105	95
26	681	601	1300	10000	260	883	631	645	110	39	77	86
27	615	580	1200	4500	250	3580	618	523	113	36	59	75
28	546	506	1000	3000	250	2910	592	459	105	48	48	64
29	482	476	900	2200	---	2090	572	425	88	46	61	59
30	435	470	800	1700	---	1590	535	378	77	40	42	53
31	391	---	740	1300	---	1340	---	348	---	37	124	---
TOTAL	45305	42977	37456	68510	12600	27703	37506	27123	8316	4308	3950	2839
MEAN	1461	1433	1208	2210	450	894	1250	875	277	139	127	94.6
MAX	11700	8530	3530	13000	1100	3580	3100	3770	765	916	950	598
MIN	391	290	700	560	250	240	535	329	77	36	34	28
CFSM	6.19	6.07	5.12	9.36	1.91	3.79	5.30	3.71	1.17	.59	.54	.40
IN.	7.14	6.77	5.90	10.80	1.99	4.37	5.91	4.28	1.31	.68	.62	.45

CAL YR 1977 TOTAL 302485 MEAN 829 MAX 11700 MIN 23 CFSM 3.51 IN 47.68
WTR YR 1978 TOTAL 318593 MEAN 873 MAX 13000 MIN 28 CFSM 3.70 IN 50.22

01350100 SCHOHARIE RESERVOIR NEAR GRAND GORGE, NY

LOCATION.--Lat 42°21'21", long 74°26'42", Schoharie County, Hydrologic Unit 02020005, in Shandaken Tunnel intake house on Intake Road, 1.6 mi (2.6 km) north of junction of Intake Road and State Highway 23, 2.5 mi (4.0 km) upstream from Gilboa Dam, and 2.6 mi (4.2 km) east of Grand Gorge.

DRAINAGE AREA.--314 mi² (813 km²).

PERIOD OF RECORD.--January 1973 to current year. Monthly contents only published as "at Gilboa" for September 1928 to December 1972.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Board of Water Supply, City of New York).

REMARKS.--Reservoir is formed by masonry and earth dam. Storage began July 24, 1926. Usable capacity 19,583 mil gal (74.12 hm³) between minimum operating level, elevation, 1,050.00 ft (320.040 m), and crest of spillway, elevation, 1,130.00 ft (344.424 m). Dead storage below elevation 1,050.00 (320.040 m), 1,968 mil gal (7.449 hm³). Figures given herein represent usable contents. Reservoir impounds water except for periods of spilling, for diversion through Shandaken Tunnel into Esopus Creek to Ashokan Reservoir, for New York City water supply.

COOPERATION.--Capacity table furnished by Department of Environmental Protection, City of New York.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 1,135.17 ft (346.000 m) Oct. 16, 1955, contents, 23,566 mil gal (89.20 hm³); minimum observed (after initial filling), 1,062.00 ft (323.698 m) Aug. 20, 1970, contents, 1,520 mil gal (5.753 hm³).

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 1,133.91 ft (345.616 m) Jan. 9, contents, 21,103 mil gal (79.87 hm³); minimum, 1,092.76 ft (333.073 m) Sept. 15, contents, 8,129 mil gal (30.77 hm³).

Capacity table (elevation, in feet, and usable contents in million gallons).

1,070.0	2,850	1,100.0	10,080
1,080.0	4,969	1,120.0	16,100
1,090.0	7,407	1,134.0	21,100

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1129.90	1130.04	1130.76	1130.22	1130.32	1128.66	1130.65	1130.26	1130.30	1126.76	1114.51	1102.60
2	1130.92	1129.98	1130.75	1130.21	1130.30	1128.01	1130.95	1130.15	1129.95	1125.47	1114.16	1102.37
3	1130.23	1129.89	1130.54	1130.17	1130.26	1128.37	1130.65	1130.09	1129.68	1124.85	1113.85	1101.98
4	1130.21	1129.80	1130.45	1130.16	1130.21	1128.13	1130.50	1130.02	1129.49	1124.45	1112.65	1101.53
5	1130.16	1129.75	1130.38	1130.19	1130.22	1127.87	1130.64	1129.95	1129.93	1126.16	1111.20	1101.05
6	1130.02	1129.83	1130.41	1130.20	1130.25	1127.53	1130.58	1130.21	1130.21	1126.40	1109.81	1100.58
7	1129.80	1129.85	1130.35	1130.19	1130.23	1127.20	1130.60	1130.23	1130.16	1126.32	1110.25	1100.08
8	1129.35	1133.15	1130.29	1130.19	1130.23	1126.92	1130.57	1130.25	1130.36	1125.86	1111.35	1099.71
9	1129.07	1131.66	1130.30	1132.08	1130.18	1126.64	1130.48	1130.25	1130.33	1125.50	1112.23	1098.20
10	1130.09	1130.84	1130.25	1130.97	1130.21	1126.40	1130.43	1130.43	1130.29	1125.08	1112.32	1096.23
11	1130.10	1131.00	1130.20	1130.59	1130.21	1126.12	1130.44	1130.38	1130.22	1124.80	1112.12	1095.15
12	1129.82	1130.63	1130.18	1130.48	1130.22	1125.86	1130.71	1130.32	1130.17	1124.42	1111.81	1094.26
13	1129.46	1130.49	1130.32	1130.41	1130.21	1125.62	1130.70	1130.26	1130.19	1123.98	1111.43	1093.56
14	1128.92	1130.40	1130.58	1130.37	1130.17	1125.44	1130.68	1130.20	1130.18	1123.43	1111.04	1093.05
15	1129.18	1130.36	1131.07	1130.32	1130.10	1126.45	1130.52	1130.95	1130.15	1122.96	1110.61	1092.80
16	1129.71	1130.35	1130.80	1130.28	1130.11	1128.39	1130.40	1130.69	1130.09	1122.52	1110.16	1092.89
17	1132.35	1130.35	1130.65	1130.32	1130.10	1128.85	1130.37	1130.21	1129.97	1122.02	1109.69	1093.00
18	1131.23	1130.43	1130.56	1130.33	1130.05	1129.23	1130.39	1130.80	1129.89	1121.56	1109.19	1093.15
19	1130.84	1130.33	1130.52	1130.31	1130.04	1129.55	1130.39	1130.74	1129.98	1121.08	1108.67	1094.80
20	1130.79	1130.28	1130.36	1130.31	1130.04	1129.87	1130.47	1130.60	1130.05	1120.52	1108.15	1096.76
21	1130.60	1130.27	1130.37	1130.29	1130.03	1130.29	1130.60	1130.51	1129.98	1120.00	1107.60	1097.57
22	1130.49	1130.26	1130.43	1130.26	1130.03	1130.72	1130.48	1130.42	1129.95	1119.46	1107.03	1098.12
23	1130.41	1130.23	1130.38	1130.26	1129.93	1130.49	1130.40	1130.35	1130.04	1118.96	1106.45	1098.56
24	1130.34	1130.20	1130.36	1130.26	1129.82	1130.51	1130.38	1130.34	1129.86	1118.45	1105.88	1098.97
25	1130.29	1130.20	1130.56	1130.30	1129.65	1130.40	1130.37	1130.45	1129.62	1117.88	1105.47	1099.31
26	1130.29	1130.27	1130.53	1131.16	1129.48	1130.34	1130.34	1130.40	1129.36	1117.26	1105.09	1099.53
27	1130.29	1130.25	1130.35	1131.15	1129.30	1130.81	1130.34	1130.35	1129.08	1116.78	1104.64	1099.76
28	1130.26	1130.23	1130.24	1130.68	1129.08	1130.90	1130.30	1130.32	1128.79	1116.21	1104.12	1099.81
29	1130.22	1130.22	1130.25	1130.53	---	1130.72	1130.29	1130.30	1128.50	1115.64	1103.60	1099.86
30	1130.16	1130.23	1130.28	1130.42	---	1130.59	1130.28	1130.29	1127.96	1115.17	1103.06	1099.80
31	1130.11	---	1130.28	1130.35	---	1130.52	---	1130.27	---	1114.58	1102.66	---
MEAN	1130.18	1130.39	1130.44	1130.45	1130.04	1128.64	1130.50	1130.35	1129.83	1121.76	1109.06	1097.84
MAX	1132.35	1133.15	1131.07	1132.08	1130.32	1130.90	1130.95	1130.95	1130.36	1126.76	1114.51	1102.60
MIN	1128.92	1129.75	1130.18	1130.16	1129.08	1125.44	1130.28	1129.95	1127.96	1114.58	1102.66	1092.80
†	19,649	19,688	19,700	19,715	19,252	19,796	19,692	19,688	18,850	14,366	10,833	10,050
‡	+1.35	+2.01	+0.60	+0.75	-25.6	+27.2	-5.37	-0.20	-43.2	-224	-176	-40.4

CAL YR 1977 MEAN 1121.45 MAX 1133.15 MIN 1083.40 ‡ +1.16
WTR YR 1978 MEAN 1124.95 MAX 1133.15 MIN 1092.80 ‡ -40.6

† Contents, in millions of gallons, on last day of month.
‡ Change in contents, equivalent in cubic feet per second.

Note.--Elevations for Oct. 1-4, Feb. 22 to Mar. 1, Apr. 20 to June 3, June 13 to Aug. 10, and Sept. 9-14 are instantaneous wire-weight gage readings furnished by Department of Environmental Protection, City of New York.

01350101 SCHOHARIE CREEK AT GILBOA, NY

LOCATION.--Lat 42°23'50", long 74°27'03", Schoharie County, Hydrologic Unit 02020005, on left bank, 200 ft (61 m) upstream from bridge on County Highway 322, 0.2 mi (0.3 km) west of village of Gilboa, 0.4 mi (0.6 km) downstream from dam on Schoharie Reservoir, and 0.8 mi (1.3 km) upstream from the Platter Kill.

DRAINAGE AREA.--314 mi² (813 km²).

PERIOD OF RECORD.--October 1975 to current year.

GAGE.--Water-stage recorder. Datum of gage is 939.56 ft (286.378 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records poor. Entire flow, runoff from 314 mi² (813 km²), except for periods of spill, Oct. 2-6, 10-11, Oct. 16 to Nov. 2, Nov. 8 to Feb. 22, Mar. 20 to June 1, and June 5-16, 20, 23, diverted from Schoharie Reservoir through Shandaken Tunnel into Esopus Creek upstream from Ashokan Reservoir for water supply of city of New York.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 31,300 ft³/s (886 m³/s) Nov. 8, 1977, gage height, 23.84 ft (7.266 m); minimum daily, 0.04 ft³/s (0.001 m³/s) on many days, June to October 1976.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge, 32,000 ft³/s (906 m³/s) Mar. 18, 1936, from information furnished by Bureau of Water Resources Development, City of New York.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 31,300 ft³/s (886 m³/s) Nov. 8, gage height, 23.84 ft (7.266 m); minimum daily, 0.35 ft³/s (0.01 m³/s) Aug. 24, 27-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	120	69	3210	483	938	2.0	2680	268	241	.66	.60	.75
2	3450	27	3310	431	800	1.5	3820	45	6.4	.66	.60	.63
3	902	10	2490	323	677	1.3	2240	16	1.5	.66	.60	.58
4	470	9.5	1950	293	640	1.2	1670	4.3	1.1	1.3	1.1	.58
5	83	1.8	1500	336	640	1.2	2430	3.8	35	.99	.75	.55
6	12	1.8	1390	235	750	1.2	2000	109	276	.85	1.3	.55
7	.93	5.5	1120	127	780	1.2	2100	120	257	.79	1.1	.63
8	1.2	8280	839	74	640	1.3	2000	177	887	.75	1.2	.55
9	1.4	9510	819	6900	620	1.3	1400	354	813	.75	.85	.55
10	114	4310	643	1130	560	1.2	1400	730	520	.75	.72	.53
11	81	4880	515	658	580	1.2	1800	530	347	.79	.64	.53
12	11	3220	474	339	520	1.1	2900	411	260	.69	.58	.55
13	1.7	2510	595	230	450	1.1	3230	369	244	.69	.52	.53
14	1.9	1910	1800	163	370	1.5	3100	333	269	.69	.48	.48
15	2.2	1500	4630	110	150	3.3	2330	2970	153	.72	.45	.50
16	9.3	1320	2980	58	110	2.0	1820	3110	25	.72	.44	.55
17	14700	1180	2260	44	140	1.0	1440	4430	14	.72	.43	.58
18	6300	1500	1670	38	98	.72	1200	3150	2.4	.72	.42	.79
19	4160	1060	1400	33	86	.78	1120	2640	29	.69	.41	2.8
20	3870	819	1150	32	46	4.5	1450	1770	26	.69	.40	.95
21	3050	712	1140	24	30	902	2050	1490	8.6	.69	.38	.79
22	2600	654	1360	21	21	2840	1570	1090	6.5	.69	.37	.72
23	2130	616	982	19	4.4	1780	1190	930	9.0	.69	.36	.66
24	1560	534	819	14	3.8	1940	1020	839	1.1	.69	.35	.63
25	1070	501	2070	30	3.8	1300	916	1120	.76	.66	.38	.63
26	737	627	1880	4640	3.6	1050	846	902	.72	.66	.37	.60
27	544	574	813	4940	3.0	3370	730	666	.72	.66	.35	.60
28	411	501	605	2940	2.5	3690	530	554	.72	.72	.35	.66
29	326	457	465	1960	---	2840	478	488	.69	.66	.35	.63
30	202	440	515	1340	---	2200	407	435	.66	.66	.35	.63
31	159	---	611	1100	---	1820	---	333	---	.63	.60	---
TOTAL	47080.63	47739.6	46005	29065	9685.1	23762.60	51867	30387.1	4438.84	22.69	17.80	20.71
MEAN	1519	1591	1484	936	346	767	1729	980	148	.73	.57	.69
MAX	14700	9510	4630	6900	938	3690	3820	4430	887	1.3	1.3	2.8
MIN	.93	1.8	465	14	2.5	.72	407	3.8	.66	.63	.35	.48

CAL YR 1977 TOTAL 288333.50 MEAN 790 MAX 14700 MIN .07
WTR YR 1978 TOTAL 290092.12 MEAN 795 MAX 14700 MIN .35

01350120 PLATTER KILL AT GILBOA, NY

LOCATION.--Lat 42°24'18", long 74°26'36", Schoharie County, Hydrologic Unit 02020005, on right bank, 190 ft (58 m) upstream from culvert on County Highway 17, 0.5 mi (0.8 km) upstream from mouth, and 0.6 mi (1.0 km) northeast of Gilboa.

DRAINAGE AREA.--11.1 mi² (28.7 km²).

PERIOD OF RECORD.--Occasional measurements, water years 1969-73. January 1975 to current year.

GAGE.--Water-stage recorder. Concrete control since Nov. 12, 1976. Altitude of gage is 1,110 ft (338 m), from topographic map.

REMARKS.--Records poor prior to June 1978, and fair thereafter.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 690 ft³/s (19.5 m³/s) Oct. 17, 1977, gage height, 4.54 ft (1.384 m); minimum daily, 1.3 ft³/s (0.037 m³/s) Oct. 6, 1976; minimum gage height, 0.12 ft (0.037 m) Sept. 8, 11, 1975.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 80 ft³/s (2.27 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 17	0645	*690	19.5	*4.54	1.384
Nov. 8	2130	301	8.52	3.72	1.134
Jan. 9	0845	355	10.05	3.71	1.131
Jan. 26	1500	ice jam		2.82	.860
Feb. 22	0315	ice jam		4.33	1.320
Mar. 18	0815	168	4.76	3.16	0.963
Mar. 22	0015	106	3.00	2.77	.844
Mar. 27	1445	114	3.23	2.83	.862
Apr. 1	2315	229	6.49	3.35	1.021
Sept. 19	0345	149	4.22	2.85	.869

Minimun discharge, 2.9 ft³/s (0.082 m³/s) Sept. 14, 15, gage height, 1.16 ft (0.354 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	10	45	17	52	12	106	12	9.7	6.1	3.7	6.6
2	63	9.3	61	17	47	12	145	10	11	5.9	3.4	5.0
3	34	9.3	48	15	43	11	85	9.3	20	5.7	3.4	4.6
4	31	9.0	40	14	40	11	69	8.7	16	22	16	4.2
5	25	9.3	29	14	38	10	80	9.0	12	11	7.2	3.9
6	25	9.0	25	15	37	10	66	10	10	7.5	25	3.7
7	21	9.3	21	14	45	10	68	10	10	6.9	25	3.4
8	18	69	14	18	46	10	61	9.0	52	6.6	32	3.4
9	22	172	13	209	40	10	53	8.3	26	6.1	16	3.1
10	21	94	12	108	36	10	48	7.7	20	6.4	12	3.0
11	18	113	14	100	34	10	47	7.5	15	6.1	10	3.1
12	16	71	16	76	30	10	58	7.5	13	5.2	8.7	3.1
13	14	58	20	59	26	11	53	7.7	17	4.8	8.3	3.0
14	13	49	26	49	23	20	52	7.7	15	5.0	7.5	2.9
15	21	44	70	44	21	40	45	12	12	5.2	6.4	2.9
16	18	39	55	40	20	17	39	16	11	6.4	6.1	3.6
17	451	34	43	37	20	25	30	28	9.7	6.1	5.7	3.4
18	218	38	36	35	19	45	25	30	15	6.1	5.4	4.8
19	129	28	30	32	19	10	22	29	29	5.0	5.0	71
20	100	26	24	30	18	11	26	24	16	4.6	5.2	24
21	73	24	22	28	17	51	24	19	13	4.4	4.6	14
22	56	22	27	27	16	100	20	17	14	4.2	4.4	12
23	46	20	21	27	15	68	16	15	11	4.2	4.4	10
24	37	20	18	29	14	62	14	15	9.7	4.2	5.9	8.7
25	29	18	20	30	14	44	13	15	8.7	3.9	6.1	8.0
26	24	18	18	100	13	31	13	13	8.7	3.7	5.2	7.5
27	22	16	17	80	13	81	12	12	8.7	4.1	4.4	7.5
28	18	16	16	64	12	79	11	11	7.5	5.7	4.2	6.9
29	16	14	15	60	---	68	10	10	6.9	3.9	4.2	6.6
30	15	13	15	58	---	61	9.7	9.3	6.6	4.2	3.9	6.1
31	13	---	15	54	---	58	---	9.3	---	4.1	9.3	---
TOTAL	1644	1081.2	846	1500	768	1008	1320.7	409.0	434.2	185.3	268.6	250.0
MEAN	53.0	36.0	27.3	48.4	27.4	32.5	44.0	13.2	14.5	5.98	8.66	8.33
MAX	451	172	70	209	52	100	145	30	52	22	32	71
MIN	13	9.0	12	14	12	10	9.7	7.5	6.6	3.7	3.4	2.9
CFSM	4.78	3.24	2.46	4.36	2.47	2.93	3.96	1.19	1.31	.54	.78	.75
IN.	5.51	3.62	2.83	5.03	2.57	3.38	4.43	1.37	1.46	.62	.90	.84

CAL YR 1977 TOTAL 8778.0 MEAN 24.0 MAX 451 MIN 1.9 CFSM 2.16 IN 29.42
WTR YR 1978 TOTAL 9715.0 MEAN 26.6 MAX 451 MIN 2.9 CFSM 2.40 IN 32.56

01350140 MINE KILL NEAR NORTH BLENHEIM, NY

LOCATION.--Lat 42°25'44", long 74°28'24", Schoharie County, Hydrologic Unit 02020005, on left bank 200 ft (61 m) upstream from bridge on State Highway 30, 0.6 mi (1.0 km) upstream from mouth, and 3.0 mi (4.8 km) southwest of North Blenheim.

DRAINAGE AREA.--16.3 mi² (42.2 km²).

PERIOD OF RECORD.--Occasional discharge measurements, water years 1969-74. December 1974 to current year.

GAGE.--Water-stage recorder. Concrete control since Sept. 23, 1975. Altitude of gage is 1,060 ft (323 m), from topographic map.

REMARKS.--Records fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,190 ft³/s (33.7 m³/s) Mar. 14, 1977, gage height, 3.41 ft (1.039 m), minimum daily, 0.50 ft³/s (0.014 m³/s) Sept. 11, 1975.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 550 ft³/s (15.6 m³/s) (Revised) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan 9	0500	575	16.3	2.48	0.756	Jan. 26	0645	*600	17.0	*2.52	0.768

Minimum daily discharge, 0.77 ft³/s (0.022 m³/s) July 27, Aug. 23, 24; minimum gage height, 0.62 ft (0.189 m) July 13-15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	61	24	129	19	43	13	153	13	8.9	1.5	1.7	9.6
2	90	20	109	18	40	12	140	14	7.0	1.3	1.5	3.7
3	61	18	76	17	38	12	82	12	7.6	1.1	1.3	2.3
4	58	17	60	16	37	12	71	11	8.9	15	18	1.8
5	44	17	43	16	35	12	112	12	7.0	7.6	6.3	1.5
6	45	17	40	18	33	12	80	15	6.3	3.4	80	1.5
7	37	25	32	21	34	12	94	13	7.6	2.3	38	1.3
8	30	150	29	30	35	12	89	10	26	1.8	48	1.3
9	50	150	25	236	32	12	67	10	12	1.7	18	1.3
10	44	96	23	100	28	12	59	10	10	1.5	10	1.3
11	34	140	26	70	26	13	67	9.6	7.0	1.5	7.0	1.3
12	30	78	30	50	24	15	92	8.2	5.6	1.3	5.6	1.3
13	25	59	45	42	23	17	82	7.6	4.5	1.1	4.5	1.3
14	28	46	134	35	22	25	76	7.6	4.5	.93	3.4	1.3
15	64	43	236	31	20	77	60	26	4.5	1.3	3.1	1.3
16	49	42	137	29	19	57	43	31	3.7	1.3	2.8	1.3
17	350	60	104	27	18	34	41	53	3.4	4.1	2.3	1.7
18	190	67	76	25	17	25	36	46	5.6	6.3	1.7	2.8
19	135	46	67	24	16	22	32	45	22	2.5	1.7	150
20	141	40	60	22	16	22	59	34	7.0	1.7	1.5	45
21	88	36	50	21	15	112	48	29	4.5	1.3	1.1	26
22	72	36	45	20	15	163	35	25	6.3	1.3	.93	21
23	61	32	41	19	15	126	31	21	4.5	1.1	.77	16
24	52	31	38	20	14	94	28	19	3.4	1.1	.77	12
25	46	28	35	50	14	65	25	20	3.1	.93	1.7	11
26	42	28	32	281	14	55	22	18	2.8	.93	1.8	8.9
27	40	28	31	137	14	143	21	14	2.8	.77	1.8	7.6
28	35	29	29	84	13	123	17	12	2.5	8.2	1.5	6.3
29	32	28	26	66	---	99	19	11	2.3	3.1	1.5	5.6
30	28	28	23	54	---	80	15	9.6	1.8	2.3	1.5	4.5
31	25	---	21	47	---	71	---	8.9	---	1.7	12	---
TOTAL	2087	1459	1852	1645	670	1559	1811	575.5	203.1	81.96	281.77	351.8
MEAN	67.3	48.6	59.7	53.1	23.9	50.3	60.4	18.6	6.77	2.64	9.09	11.7
MAX	350	150	236	281	43	163	153	53	26	15	80	150
MIN	25	17	21	16	13	12	15	7.6	1.8	.77	.77	1.3

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CAL YR 1977  TOTAL  14575.62   MEAN 39.9   MAX 610   MIN .80
WTR YR 1978  TOTAL  12577.13   MEAN 34.5   MAX 350   MIN .77
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01350180 SCHOHARIE CREEK AT NORTH BLENHEIM, NY

LOCATION.--Lat 42°27'57", long 74°27'45", Schoharie County, Hydrologic Unit 02020005, on left bank 2300 ft (701 m) upstream from West Kill, and 1.2 mi (1.9 km) upstream from bridge on State Highway 30 in North Blenheim. Water-quality sampling site at discharge station.

DRAINAGE AREA.--359 mi^2 (930 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Occasional measurements, water years 1969-70. October 1970 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 800 ft (244 m), from topographic map. Prior to Oct. 1, 1971, at datum 1.00 ft (0.305 m) higher.

REMARKS.--Records poor. Regulation of flow by Blenheim-Gilboa Pumped Storage Project immediately upstream from gage. Entire flow, runoff from 314 mi^2 (813 km^2), except for periods of spill, diverted from Schoharie Reservoir through Shandaken Tunnel into Esopus Creek upstream from Ashokan Reservoir for water supply of City of New York. For periods of spill see station 01350101.

AVERAGE DISCHARGE.--8 years, 555 ft^3/s (15.72 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 41,400 ft^3/s (1,170 m^3/s) June 23, 1972, gage height, 12.29 ft (3.746 m) from rating curve extended above 14,000 ft^3/s (396 m^3/s); maximum gage height, 13.75 ft (4.191 m) Nov. 8, 1977; no flow Oct. 21-28, 1972, Sept. 12-14, 1973.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 35,300 ft^3/s (1,000 m^3/s) Nov. 8, gage height, 13.75 ft (4.191 m); minimum daily, 3.6 ft^3/s (0.10 m^3/s) Sept. 11, 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	243	100	2620	620	900	70	2870	374	343	5.0	4.2	27
2	2810	171	2800	600	780	35	4050	146	83	4.5	4.2	9.0
3	959	173	1920	500	760	28	2340	40	102	4.0	4.8	8.3
4	602	56	1540	420	540	16	1860	20	73	96	77	7.6
5	218	56	1330	450	600	16	2470	8.6	60	36	23	5.3
6	127	56	1280	490	640	15	2130	137	311	14	185	4.0
7	105	94	984	400	660	15	2200	285	352	11	123	4.8
8	64	3800	870	430	600	28	2140	204	953	5.9	231	4.5
9	139	11400	803	8000	540	45	1670	406	853	5.3	60	4.2
10	162	3910	702	5440	500	56	1560	798	545	4.5	27	4.2
11	231	4730	539	2350	480	40	1520	568	434	4.5	15	3.6
12	72	2630	528	1660	390	30	2600	434	307	4.8	14	3.6
13	59	1970	715	1580	390	30	2500	485	356	5.0	11	3.8
14	46	1570	1600	1200	370	48	2400	464	369	5.6	8.0	4.5
15	148	1420	4320	1000	190	260	1800	2460	243	6.3	8.3	13
16	119	1210	2250	880	130	98	1600	2460	83	5.6	8.0	22
17	14800	1150	1820	660	180	107	1300	4080	34	4.8	7.0	25
18	7660	1520	1330	740	180	63	1100	2630	70	4.8	7.0	20
19	3860	1030	1250	700	130	55	1100	2110	121	5.3	7.3	574
20	3130	1030	1050	700	150	115	1600	1610	113	5.9	6.6	83
21	2180	836	1040	580	100	959	1900	1430	70	6.3	5.9	57
22	1740	825	1230	540	60	3140	1300	1130	32	5.9	5.6	60
23	1470	760	905	580	28	1930	1100	935	32	5.6	5.9	38
24	1200	715	876	480	40	2120	1030	709	23	4.8	6.3	22
25	859	672	1740	520	40	1510	882	1070	11	4.5	6.6	19
26	740	771	1510	5870	40	1410	865	893	11	4.5	5.9	20
27	591	672	818	4990	45	3680	781	702	9.4	4.8	5.6	12
28	464	728	715	2490	54	3810	608	619	8.0	5.9	4.8	19
29	365	574	652	1720	---	2700	580	568	6.3	4.5	4.8	16
30	348	690	761	1200	---	2190	534	596	4.8	4.5	5.3	17
31	171	---	700	1000	---	1870	---	392	---	4.2	15	---
TOTAL	45682	45319	41198	48810	9517	26489	50390	28763.6	6012.5	294.3	903.1	1111.4
MEAN	1474	1511	1329	1575	340	854	1680	928	200	9.49	29.1	37.0
MAX	14800	11400	4320	8000	900	3810	4050	4080	953	96	231	574
MIN	46	56	528	400	28	15	534	8.6	4.8	4.0	4.2	3.6

CAL YR 1977 TOTAL 274984.4 MEAN 753 MAX 14800 MIN 3.0
WTR YR 1978 TOTAL 304489.9 MEAN 834 MAX 14800 MIN 3.6

01350180 SCHOHARIE CREEK AT NORTH BLENHEIM, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1971 to current year.
CHEMICAL DATA: 1971-72 (a), 1975-76 (d).
NUTRIENT DATA: 1971 (a), 1975-76 (d).
BIOLOGICAL DATA:
Coliform bacteria--1975-76 (d).

SEDIMENT DATA: 1975-76 (a).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1971 to current year.

REMARKS.--Temperature probe may be influenced by solar radiation during periods of low flow. No record July 21 to Sept. 30, due to instrument malfunction.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum (water years 1973-76), 33.5°C Aug. 7, 1973; minimum, freezing point on many days during winter periods, except water year 1978.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Minimum, 0.5°C on many days during winter period.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	16.5	14.5	15.0	11.0	9.0	9.5	5.5	5.5	5.5	2.0	1.5	2.0
2	16.5	15.0	15.5	12.0	9.0	10.5	5.5	5.5	5.5	2.0	1.5	2.0
3	15.0	14.5	15.0	12.5	9.5	10.5	5.5	5.5	5.5	2.0	1.5	1.5
4	15.0	14.5	14.5	13.0	10.5	12.0	5.5	5.5	5.5	2.0	1.5	1.5
5	15.5	13.5	14.5	11.5	10.5	11.0	5.5	4.5	5.0	2.0	1.5	1.5
6	15.0	13.0	14.0	12.0	10.5	11.0	4.5	4.5	4.5	2.0	1.5	2.0
7	14.0	12.5	13.0	11.0	10.5	11.0	4.5	4.0	4.0	2.0	1.5	2.0
8	13.5	12.5	13.0	11.0	10.0	10.5	4.0	4.0	4.0	2.0	2.0	2.0
9	14.5	13.0	14.0	10.5	10.0	10.0	4.0	3.5	3.5	3.0	2.0	2.5
10	13.5	13.0	13.5	10.5	10.5	10.5	3.5	3.0	3.5	2.5	2.0	2.5
11	13.5	12.5	13.0	10.5	10.0	10.5	3.5	3.0	3.0	2.0	2.0	2.0
12	14.5	11.5	13.0	10.0	9.5	10.0	3.0	2.0	2.5	2.0	1.5	2.0
13	13.0	11.5	12.0	9.5	8.5	9.0	2.5	2.0	2.0	1.5	1.5	1.5
14	12.0	11.0	11.5	8.5	8.0	8.5	2.5	2.0	2.0	1.5	1.5	1.5
15	13.0	11.5	12.0	8.5	8.0	8.0	3.0	2.0	2.5	1.5	1.5	1.5
16	12.5	11.0	12.0	8.5	8.0	8.5	3.0	3.0	3.0	1.5	1.0	1.5
17	12.5	11.0	11.5	9.0	8.5	8.5	3.0	3.0	3.0	1.5	1.0	1.0
18	11.0	10.5	10.5	8.5	8.5	8.5	2.5	2.5	2.5	1.5	1.0	1.0
19	10.5	10.5	10.5	8.5	8.0	8.0	2.5	2.0	2.5	1.5	1.0	1.0
20	10.5	10.0	10.5	8.0	8.0	8.0	2.5	2.0	2.0	1.0	1.0	1.0
21	10.5	10.0	10.0	8.0	8.0	8.0	2.0	2.0	2.0	1.5	1.0	1.0
22	10.0	9.5	10.0	8.0	7.5	7.5	2.0	2.0	2.0	1.5	1.0	1.0
23	10.0	9.5	9.5	7.5	7.5	7.5	2.0	2.0	2.0	1.5	1.0	1.0
24	10.0	9.0	9.5	7.5	7.5	7.5	2.5	2.0	2.0	1.5	1.0	1.0
25	10.5	9.5	10.0	7.5	7.0	7.0	2.5	2.0	2.0	1.5	1.0	1.5
26	11.0	10.0	10.5	7.0	6.5	7.0	2.0	2.0	2.0	1.5	1.0	1.0
27	11.0	10.5	10.5	6.5	6.0	6.5	2.0	1.5	2.0	1.5	1.5	1.5
28	11.0	10.5	11.0	6.0	5.5	6.0	2.0	2.0	2.0	1.5	1.5	1.5
29	11.5	10.0	10.5	6.0	5.5	5.5	2.0	1.5	2.0	1.5	1.0	1.5
30	10.5	9.5	10.0	5.5	5.5	5.5	2.0	1.5	2.0	1.5	1.0	1.0
31	10.5	9.0	9.5	---	---	---	2.0	1.5	2.0	1.5	1.0	1.0
MONTH	16.5	9.0	12.0	13.0	5.5	8.5	5.5	1.5	3.0	3.0	1.0	1.5

01350180 SCHOHARIE CREEK AT NORTH BLENHEIM, NY--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	1.5	1.0	1.0	2.0	1.0	1.0	2.5	2.0	2.5	7.5	7.0	7.5
2	1.5	1.0	1.5	2.5	1.0	1.0	3.0	2.5	2.5	9.0	6.5	7.5
3	1.5	1.0	1.0	1.5	1.0	1.0	2.5	2.0	2.5	13.0	6.5	9.5
4	1.5	1.0	1.0	1.5	.5	1.0	3.0	2.5	2.5	14.0	5.5	10.0
5	1.5	1.0	1.0	1.5	.5	1.0	3.0	3.0	3.0	10.5	8.0	9.0
6	1.0	.5	1.0	2.0	1.0	1.0	3.0	3.0	3.0	9.0	7.5	8.0
7	1.5	1.0	1.5	2.5	1.0	1.5	3.5	3.0	3.0	9.5	7.5	8.0
8	1.5	1.0	1.0	1.5	.5	1.0	3.0	3.0	3.0	10.5	7.5	8.5
9	1.5	1.0	1.0	2.5	.5	1.5	3.5	3.0	3.0	10.0	9.0	9.5
10	1.5	1.0	1.0	3.0	.5	1.5	3.5	3.0	3.5	9.5	9.0	9.5
11	1.5	1.0	1.5	3.5	.5	2.0	4.0	3.5	3.5	11.5	9.5	10.0
12	2.0	1.0	1.5	4.0	1.5	2.5	4.5	3.5	4.0	11.5	10.0	10.5
13	1.5	1.0	1.5	6.5	1.0	3.0	5.0	4.0	4.5	11.0	10.5	10.5
14	1.5	1.0	1.0	3.0	2.0	2.5	4.5	4.5	4.5	11.0	11.0	11.0
15	2.5	1.0	1.5	2.0	2.0	2.0	4.5	4.0	4.5	11.0	10.5	11.0
16	1.5	.5	1.0	3.0	2.0	2.0	4.5	4.0	4.5	11.0	11.0	11.0
17	1.5	1.0	1.0	3.5	1.0	2.0	5.0	4.5	4.5	11.0	11.0	11.0
18	2.0	1.0	1.5	4.0	1.0	2.0	5.5	4.5	5.0	11.0	11.0	11.0
19	2.0	.5	1.0	5.0	1.0	2.5	5.0	5.0	5.0	11.5	11.0	11.5
20	2.0	.5	1.0	5.0	1.5	2.5	5.0	5.0	5.0	12.5	11.5	12.0
21	1.5	.5	1.0	4.0	2.0	2.5	5.5	5.0	5.0	13.0	11.5	12.0
22	1.0	.5	1.0	2.5	1.5	2.0	5.5	5.0	5.5	13.0	12.5	12.5
23	2.5	.5	1.0	2.0	2.0	2.0	6.0	5.5	5.5	14.0	12.5	13.5
24	1.5	1.0	1.0	2.5	2.0	2.0	6.5	5.5	6.0	14.0	13.0	13.5
25	2.0	.5	1.5	2.5	2.0	2.0	6.5	6.0	6.0	14.5	13.5	14.0
26	2.0	.5	1.5	2.0	2.0	2.0	7.0	6.0	6.5	15.5	14.5	15.0
27	2.0	1.0	1.0	2.0	2.0	2.0	7.5	6.5	7.0	17.0	15.0	16.0
28	2.0	1.0	1.0	2.0	1.5	2.0	8.0	7.0	7.5	17.5	15.5	16.5
29	---	---	---	2.0	2.0	2.0	8.0	7.0	7.5	20.0	17.5	18.5
30	---	---	---	2.5	2.0	2.0	8.0	7.0	7.5	19.5	17.5	18.5
31	---	---	---	2.5	2.0	2.0	---	---	---	21.0	14.5	17.5
MONTH	2.5	.5	1.0	6.5	.5	2.0	8.0	2.0	4.5	21.0	5.5	11.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	17.5	14.5	16.0	28.0	21.0	24.0						
2	20.0	15.5	17.5	29.5	20.0	24.0						
3	17.5	16.5	17.0	25.5	21.0	23.0						
4	20.5	16.5	18.0	21.0	19.0	20.0						
5	19.5	16.0	17.5	26.5	19.0	22.5						
6	20.0	17.5	19.0	27.5	20.5	23.5						
7	19.5	19.0	19.5	29.5	21.0	25.0						
8	20.5	19.5	20.5	30.0	22.5	26.0						
9	20.5	20.5	20.5	31.0	24.0	27.0						
10	21.0	20.0	20.5	30.5	23.0	25.5						
11	21.5	20.0	21.0	26.5	20.5	22.5						
12	22.0	19.5	20.5	27.5	19.0	22.5						
13	20.0	19.5	20.0	29.0	19.5	23.5						
14	21.0	20.0	20.5	28.0	22.0	24.0						
15	21.0	18.5	20.0	28.0	21.5	24.5						
16	22.5	18.0	20.0	28.0	22.0	25.0						
17	21.0	18.5	19.5	26.0	22.5	24.0						
18	24.0	18.5	20.5	29.5	21.5	24.5						
19	22.5	19.5	20.5	30.5	21.0	25.5						
20	22.5	19.0	20.5	31.0	23.0	26.5						
21	22.0	19.0	20.5	---	---	---						
22	24.5	20.0	22.0	---	---	---						
23	24.5	19.0	21.5	---	---	---						
24	26.0	18.5	22.0	---	---	---						
25	27.5	19.5	23.5	---	---	---						
26	23.5	20.5	22.5	---	---	---						
27	29.5	21.0	25.0	---	---	---						
28	30.0	24.0	26.5	---	---	---						
29	29.5	23.5	26.0	---	---	---						
30	29.0	23.0	25.0	---	---	---						
31	---	---	---	---	---	---						
MONTH	30.0	14.5	21.0	31.0	19.0	24.0						

01350200 WEST KILL AT NORTH BLENHEIM, NY

LOCATION.--Lat 42°28'07", long 74°27'34", Schoharie County, Hydrologic Unit 02020005, on left bank 75 ft (23 m) upstream from highway bridge on State Highway 30, in North Blenheim, 100 ft (30 m) downstream from Mill Creek and 0.2 mi (0.3 km) upstream from mouth.

DRAINAGE AREA.--44.6 mi^2 (115.5 km^2).

PERIOD OF RECORD.--July 1975 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 810 ft (247 m), from topographic map.

REMARKS.--Records poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,100 ft^3/s (343 m^3/s) Oct. 18, 1975, gage height, 5.91 ft (1.801 m) from rating curve extended above 2,700 ft^3/s (76 m^3/s); maximum gage height, 7.82 ft (2.384 m) Oct. 17, 1977; minimum discharge, 1.4 ft^3/s (0.040 m^3/s) Aug. 24, 1975; minimum gage height, 0.68 ft (0.207 m) July 25, 1977.

EXTREMES FOR CURRENT YEAR: Peak discharges above base of 2,000 ft^3/s (56.6 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 17	0545	*a10,100	286	*7.82	2.384	Feb. 10	0900	ice jam		5.78	1.762
Nov. 8	2045	a3,000	85.0	5.73	1.747	Apr. 1	2230	a2,090	59.2	5.23	1.594
Jan. 9	1245	a2,800	79.3	5.63	1.716						

a From rating curve extended above 400 ft^3/s (11.3 m^3/s).

Minimum daily discharge, 2.1 ft^3/s (0.059 m^3/s) Sept. 8, minimum gage height, 1.61 ft (0.491 m) Sept. 11, 14, 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	380	52	297	44	110	30	558	52	38	5.0	4.8	13
2	363	48	271	43	100	30	817	51	27	4.8	4.7	8.1
3	207	45	202	43	90	30	347	46	34	4.5	4.2	4.3
4	196	42	167	42	84	29	274	42	37	24	16	3.6
5	136	46	133	41	80	29	574	46	27	16	11	3.0
6	132	48	120	45	74	28	343	56	23	11	45	2.5
7	116	74	110	50	70	28	450	47	21	7.2	49	2.2
8	97	834	100	60	68	27	387	41	52	5.2	64	2.1
9	179	802	90	887	66	27	260	43	44	4.8	23	2.2
10	149	330	80	334	64	27	226	39	38	4.7	14	2.2
11	109	532	70	190	62	27	249	35	25	4.5	11	2.2
12	95	271	90	150	62	27	399	32	20	4.2	11	2.3
13	82	205	130	130	60	30	370	30	22	4.0	17	2.4
14	83	166	350	110	60	50	343	30	23	4.0	11	2.2
15	181	144	582	100	60	120	233	69	18	6.5	9.6	2.2
16	138	142	278	90	56	97	183	73	16	9.0	7.2	2.7
17	3530	145	205	82	54	71	155	110	14	9.0	5.2	3.1
18	704	146	162	76	54	58	137	104	21	16	4.8	3.2
19	405	117	144	70	52	58	133	106	60	7.2	4.7	289
20	405	104	127	66	50	58	214	86	28	4.7	4.5	69
21	278	99	131	60	50	120	185	82	22	4.2	4.3	39
22	220	99	127	60	47	550	141	71	23	3.9	4.0	28
23	175	86	100	60	45	381	121	64	18	3.7	3.9	23
24	146	88	84	70	42	317	110	60	16	4.8	3.7	19
25	129	77	70	150	38	211	97	61	14	4.0	4.5	16
26	114	88	64	430	35	183	86	51	12	3.7	4.8	12
27	99	79	60	317	34	387	79	45	12	3.7	4.3	10
28	86	77	54	180	32	405	71	40	11	11	4.0	9.0
29	74	73	50	140	---	309	64	37	9.0	5.8	4.2	7.2
30	65	73	48	130	---	260	58	33	6.5	4.8	4.2	5.8
31	58	---	45	120	---	236	---	29	---	4.5	12	---
TOTAL	9131	5132	4541	4370	1699	4240	7664	1711	731.5	210.4	375.6	590.5
MEAN	295	171	146	141	60.7	137	255	55.2	24.4	6.79	12.1	19.7
MAX	3530	834	582	887	110	550	817	110	60	24	64	289
MIN	58	42	45	41	32	27	58	29	6.5	3.7	3.7	2.1
CFSM	6.61	3.83	3.27	3.16	1.36	3.07	5.72	1.24	.55	.15	.27	.44
IN.	7.62	4.28	3.79	3.64	1.42	3.54	6.39	1.43	.61	.18	.31	.49

CAL YR 1977 TOTAL 56842.0 MEAN 156 MAX 3800 MIN 3.2 CFSM 3.50 IN 47.41
WTR YR 1978 TOTAL 40396.0 MEAN 111 MAX 3530 MIN 2.1 CFSM 2.49 IN 33.69

01350355 SCHOHARIE CREEK AT BREAKABEEN, NY

LOCATION.--Lat 42°32'10", long 74°24'40", Schoharie County, Hydrologic Unit 02020005, on left bank 100 ft (30 m) downstream from bridge on State Highway 30, 0.9 mi (1.4 km) north of Breakabeen, and 1.1 mi (1.8 km) downstream from Keyser Kill.

DRAINAGE AREA.--471 mi² (1,220 km²).

PERIOD OF RECORD.--July 1975 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 700 ft (213.4 m), from topographic map.

REMARKS.--Records good except those for winter periods, which are poor. Regulation of flow by Blenheim-Gilboa Pumped Storage Project. Entire flow, runoff from 314 mi² (813 km²), except for periods of spill, diverted from Schoharie Reservoir through Shandaken Tunnel into Esopus Creek upstream from Ashokan Reservoir for water supply of City of New York. For periods of spill see station 01350101.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 36,000 ft³/s (1,020 m³/s) Nov. 9, 1977, gage height, 16.50 ft (5.029 m); minimum, 10 ft³/s (0.28 m³/s) Sept. 18, 19, 1975, gage height, 0.63 ft (0.192 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 36,000 ft³/s (1,020 m³/s) Nov. 9, gage height, 16.50 ft (5.029 m); minimum, 12 ft³/s (0.34 m³/s) July 27, Sept. 9-11, 12, 14, 15, gage height, 0.82 ft (0.250 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	522	227	2880	673	1010	120	3780	492	409	23	16	52
2	3760	157	3510	645	898	80	6000	274	106	21	15	28
3	1510	147	2300	546	848	70	3280	147	152	20	15	21
4	1030	145	1740	469	571	60	2460	106	140	106	94	19
5	554	130	1390	492	673	60	3480	96	96	100	55	18
6	401	135	1360	540	720	60	2930	201	331	38	224	16
7	331	254	1090	452	800	60	3120	394	379	30	210	15
8	242	6910	923	492	700	70	3020	283	1030	25	313	14
9	398	15300	864	11000	620	80	2230	463	984	21	130	13
10	424	5020	762	7000	580	110	2060	889	680	19	63	12
11	476	6320	564	2730	540	90	2030	673	480	18	44	12
12	244	3260	571	1890	450	80	3580	546	359	18	37	13
13	207	2310	725	1720	450	80	3380	558	425	16	40	14
14	175	1800	1390	1410	440	150	3330	540	415	16	32	13
15	442	1560	6060	1120	250	540	2350	2630	296	18	26	15
16	412	1330	3040	984	200	250	1820	2840	152	19	24	26
17	18000	1250	2160	747	240	220	1510	5100	63	24	21	33
18	9600	1660	1560	840	240	174	1310	3250	85	27	20	32
19	5390	1060	1400	770	220	157	1260	2530	220	21	19	856
20	4250	1020	1170	778	200	207	2010	1850	160	17	19	174
21	2870	832	1100	652	160	1010	2130	1600	119	16	18	93
22	2200	848	1360	604	120	4650	1560	1310	79	16	18	84
23	1810	762	993	645	100	2730	1300	1050	66	15	16	66
24	1470	732	923	552	90	3020	1180	808	59	15	16	46
25	1040	666	1760	640	80	2110	1040	1150	41	15	16	40
26	689	762	1830	10400	78	1920	1020	984	37	13	18	37
27	702	688	896	5940	84	4740	899	762	37	13	17	32
28	584	702	824	2850	90	5200	725	673	32	24	16	29
29	458	591	717	1960	---	3630	702	584	29	19	16	31
30	436	659	666	1480	---	2650	666	604	25	17	16	29
31	331	---	808	1230	---	2410	---	409	---	16	26	---
TOTAL	61158	57277	47358	62291	11452	36988	66161	33796	7488	776	1614	1883
MEAN	1973	1909	1528	2009	409	1193	2205	1090	250	25.0	52.1	62.8
MAX	18000	15300	6060	11000	1010	5200	6000	5100	1030	106	313	856
MIN	175	130	571	452	78	60	666	96	25	13	15	12

CAL YR 1977 TOTAL 367735 MEAN 1007 MAX 18200 MIN 16
WTR YR 1978 TOTAL 388242 MEAN 1064 MAX 18000 MIN 12

01351500 SCHOHARIE CREEK AT BURTONSVILLE, NY

LOCATION.--Lat 42°48'00", long 74°15'48", Schenectady County, Hydrologic Unit 02020005, on right bank 0.4 mi (0.6 km) south of Burtonsville, 2.7 mi (4.3 km) north of Esperance, and 13.5 mi (21.7 km) upstream from mouth.

DRAINAGE AREA.--883 mi² (2,287 km²).

PERIOD OF RECORD.--October 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 507.98 ft (154.832 m) National Geodetic Vertical Datum of 1929, unadjusted.

REMARKS.--Records good except those for winter periods, which are poor. Regulation of flow by Blenheim-Gilboa Pumped Storage Project. Entire flow, runoff from 314 mi² (813 km²), except for periods of spill, diverted from Schoharie Reservoir through Shandaken Tunnel into Esopus Creek upstream from Ashokan Reservoir for water supply of City of New York. For periods of spill see station 01350101.

AVERAGE DISCHARGE.--39 years, 1,004 ft³/s (28.43 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 76,500 ft³/s (2,170 m³/s) Oct. 16, 1955, gage height, 12.39 ft (3.776 m); minimum, 2.4 ft³/s (0.068 m³/s) Sept. 24, 25, 1964.

EXTREMES OUTSIDE PERIOD OF RECORD.--Floods of March 1936 and September 1938 reached stages of 10.5 (3.20 m) and 10.2 ft (3.11 m), respectively, from information furnished by local residents. However, flood of October 1903 is known to have reached a higher stage than the 1936 or 1938 flood.

EXTREMES FOR CURRENT YEAR.--Maximum discharge observed, 40,400 ft³/s (1,144 m³/s) Nov. 9, gage height, 8.51 ft (2.594 m), minimum, 26 ft³/s (0.74 m³/s) Sept. 10, 11, gage height, 0.66 ft (0.201 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	836	645	4710	1300	1910	280	7260	855	1240	80	61	50
2	4640	528	7730	1100	1670	350	13100	694	711	72	52	69
3	2910	425	5030	1000	1440	320	6730	462	449	66	48	75
4	1980	413	3780	1000	1140	270	4620	357	514	75	69	56
5	1440	402	2860	940	1100	230	6510	327	402	175	220	46
6	983	501	2710	1040	1300	230	5730	357	347	187	164	40
7	894	475	2460	874	1400	220	5650	528	556	104	425	37
8	677	5730	1960	694	1500	220	5610	570	1060	87	1280	33
9	874	29400	1880	16100	1200	240	4230	514	1740	75	745	30
10	1510	10200	1600	14300	1100	270	3680	694	1600	66	379	26
11	1080	10500	1280	5850	1100	300	3620	1040	929	59	271	28
12	911	6560	1240	3740	1100	250	5930	762	728	50	200	44
13	694	4400	1580	2970	1000	250	5730	645	599	46	213	97
14	584	3460	2250	2630	900	357	5490	694	645	46	181	69
15	1310	2880	10300	2190	600	1600	4130	2250	599	193	139	59
16	1510	2540	6950	1880	600	2190	3150	3840	402	125	108	54
17	26100	2360	4330	1750	520	1310	2540	6820	298	112	93	54
18	22800	2880	3240	1700	560	1120	2300	5330	220	93	80	69
19	9230	2360	2790	1900	560	929	2140	4500	366	87	72	614
20	7400	1880	2460	1900	540	1040	2740	3240	501	75	66	874
21	5260	1640	2280	1700	520	2060	3560	2540	347	61	59	280
22	3900	1620	2740	1500	500	10700	2710	2190	298	52	52	187
23	3180	1440	2250	1700	430	7540	2170	1760	256	46	48	158
24	2490	1420	1910	1700	400	7400	1780	1440	200	40	46	139
25	2140	1260	2200	1860	370	4690	1710	1470	175	37	48	108
26	1810	1400	2400	4710	350	3550	1550	1600	143	34	50	90
27	1470	1400	1800	11600	320	6380	1440	1220	125	34	52	83
28	1240	1260	1530	5890	280	11500	1220	1020	121	50	48	77
29	1060	1260	1440	3680	---	7780	1000	911	101	83	44	69
30	874	1180	1400	2630	---	6260	1060	780	90	69	40	64
31	780	---	1500	2280	---	5220	---	780	---	75	42	---
TOTAL	106567	102419	92610	104318	24610	85116	119290	50410	15764	2454	5395	3679
MEAN	3438	3414	2987	3365	879	2746	3976	1626	525	79.2	174	123
MAX	22800	29400	10300	16100	1910	11500	13100	6820	1740	193	1280	874
MIN	584	402	1240	874	280	220	1000	327	90	34	40	26

CAL YR 1977 TOTAL 723357 MEAN 1982 MAX 31700 MIN 20
WTR YR 1978 TOTAL 712632 MEAN 1952 MAX 29400 MIN 26

01354000 MOHAWK RIVER AT TRIBES HILL, NY

LOCATION.--Lat 42°56'42", long 74°17'21", Montgomery County, Hydrologic Unit 02020004, at bridge on highway between Tribes Hill and Fort Hunter, 0.3 mi (0.5 km) downstream from Schoharie Creek.

DRAINAGE AREA.--3,096 mi² (8,019 km²).

PERIOD OF RECORD.--Water years 1973 to current year.
CHEMICAL DATA: 1973 (b), 1974-75 (d), 1976-77 (b), 1978 (d).
MINOR ELEMENTS DATA: 1974-76 (d), 1977 (c), 1978 (d).
ORGANIC DATA: TOC--1974 (c), 1975 (d), 1976-77 (c), 1978 (d).
NUTRIENT DATA: 1973 (b), 1974-76 (d), 1977 (c), 1978 (d).
BIOLOGICAL DATA:
Coliform bacteria--1977-78 (d).

REMARKS.--Water-discharge data are based on records for 01357499 diversion from Mohawk River at Crescent Dam, and 01357500 Mohawk River at Cohoes.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, CHEM-ICAL (LOW LEVEL) (MG/L)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	CAR-BONATE (MG/L AS CO3)
OCT												
27...	1230	E5940	250	7.6	10.0	4.0	11.5	106	15			
NOV												
15...	1200	E8320	270	7.2	6.0	7.0	13.3	104	43	--	1732	--
DEC												
14...	0800	E6780	315	7.5	.0	5.0	14.6	103	12	--	K3000	--
JAN												
27...	1630	E23200	245	7.2	.0	15	14.8	101	12	--	K29000	--
FEB												
15...	1630	E5210	270	6.1	.5	3.0	14.6	101	13	--	6400	--
MAR												
23...	0945	E28000	265	7.7	2.0	45	13.9	103	15	--	800	--
APR												
18...	1100	E11000	190	7.2	5.0	8.0	13.8	110	10	--	K6300	0
MAY												
17...	1730	E12900	190	6.7	12.0	4.0	11.0	101	15	--	K6700	--
JUN												
06...	1300	E2840	250	8.1	21.0	3.0	10.4	109	35	--	900	0
27...	1630	E2510	235	7.7	23.0	4.0	8.7	100	--	--	500	--
JUL												
25...	0930	E966	330	7.8	25.5	3.0	7.9	96	--	15	1200	--
AUG												
23...	1330	E1110	295	8.6	25.0	3.0	9.8	120	--	24	50	--
										27	K23	--

DATE	BICAR-BONATE (MG/L AS HCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)
OCT											
27...	--	--	--	155	11	.29	.75	.46	1.3	.03	.00
NOV											
15...	--	--	--	153	28	.25	.58	.33	1.0	.05	.01
DEC											
14...	--	--	--	200	16	--	--	--	--	--	--
JAN											
27...	--	--	--	133	50	.17	.53	.36	1.2	.09	.01
FEB											
15...	--	--	--	174	6	.58	1.1	.52	1.8	.03	.01
MAR											
23...	110	20	12	148	107	.28	.98	.70	1.9	.15	.02
APR											
18...	--	--	--	103	15	.30	.63	.33	1.4	.04	.00
MAY											
17...	64	18	9.9	126	7	.35	.76	.41	1.4	.04	.00
JUN											
06...	--	--	--	150	0	.47	.94	.47	1.5	.04	.00
27...	--	--	--	--	4	.20	.64	.44	1.4	.02	--
JUL											
25...	--	--	--	195	0	.79	1.7	.91	2.1	.05	--
AUG											
23...	--	--	--	192	8	.29	1.4	1.1	1.8	.06	--

E Estimated.

K Results based on colony count outside the acceptable range (non-ideal colony count).

01354000 MOHAWK RIVER AT TRIBES HILL, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	ARSENIC TOTAL (UG/L AS AS)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	OIL AND GREASE (MG/L)
OCT											
27...	5	1	90	4	400	19	<.5	20	7.2	--	1
NOV											
15...	1	1	30	9	700	1	<.5	20	10	--	0
DEC											
14...	1	0	260	9	750	15	<.5	20	12	--	2
JAN											
27...	0	0	10	10	1200	2	<.5	30	8.6	.00	4
FEB											
15...	0	0	80	8	390	1	<.5	20	5.7	.00	0
MAR											
23...	2	0	50	11	3200	10	<.5	30	8.8	.00	0
APR											
18...	1	1	70	6	540	0	<.5	10	5.8	.00	4
MAY											
17...	1	0	40	4	420	3	<.5	20	4.9	.00	0
JUN											
06...	2	0	10	6	260	3	<.5	20	7.5	.00	1
27...	2	1	20	3	280	1	<.5	10	7.5	--	0
JUL											
25...	2	1	20	11	250	1	<.5	10	6.1	--	0
AUG											
23...	1	1	20	1	160	4	<.5	20	4.8	--	0

01354160 MOHAWK RIVER AT LOCK 10 AT CRANESVILLE, NY

LOCATION.--Lat 42°55'03", long 74°08'31", Montgomery County, Hydrologic Unit 02020004, at Erie (Barge) Canal Lock 10, 0.2 mi (0.3 km) upstream from Evas Kill, 0.3 mi (0.5 km) west of Cranesville, and 0.8 mi (1.3 km) downstream from Terwilleger Creek.

DRAINAGE AREA.--3,220 mi² (8,340 km²).

PERIOD OF RECORD.--Water years 1969 to current year.
CHEMICAL DATA: 1969 (d), 1970-75 (e), 1976-77 (b), 1978 (d).
MINOR ELEMENTS DATA: 1971 (a), 1972 (c), 1973 (b), 1974-75 (d), 1976-78 (d).
ORGANIC DATA: TOC--1974 (c), 1975 (d), 1976-78 (c).
NUTRIENT DATA: 1969-75 (e), 1976-78 (c).
BIOLOGICAL DATA:
Coliform bacteria--1978 (d).

REMARKS.--Water-discharge data are based on records for 01357499 diversion from Mohawk River at Crescent Dam, and 01357500 Mohawk River at Cohoes.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, CHEM-ICAL (LOW LEVEL) (MG/L)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	CAR-BONATE (MG/L AS CO3)
OCT												
27...	1115	E5940	220	7.5	9.5	8.0	12.0	108	10	--	932	--
NOV												
15...	1500	E8320	200	7.7	6.0	20	13.6	103	8	--	K1680	--
DEC												
14...	0930	E6780	240	7.4	.0	6.0	14.4	101	9	--	K20000	--
MAR												
23...	1130	E28000	185	7.4	.5	85	14.2	100	15	--	1950	0
APR												
18...	0930	E11000	162	6.4	6.0	9.0	12.6	103	10	--	K850	--
MAY												
17...	1500	E12900	150	6.3	11.5	10	11.4	106	15	--	K13500	0
JUN												
06...	1500	E2840	230	8.1	21.0	6.0	9.4	104	20	--	K75	--
27...	1400	E2510	285	7.8	23.0	4.0	8.6	99	--	20	K110	--
JUL												
25...	1130	E966	310	8.2	26.0	3.0	8.7	107	--	22	K106	--
AUG												
23...	1100	E1110	333	8.7	27.0	3.0	9.3	108	--	23	K33	--

DATE	BICAR-BONATE (MG/L AS HCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)
OCT											
27...	--	--	--	157	14	.17	.47	.30	1.0	.03	.00
NOV											
15...	--	--	--	133	31	.03	.33	.30	.76	.05	.01
DEC											
14...	--	--	--	157	27	--	--	--	--	--	--
MAR											
23...	82	15	8.2	94	132	.14	.86	.72	1.6	.17	.02
APR											
18...	--	--	--	89	9	.09	.30	.21	.64	.02	.00
MAY											
17...	49	15	7.7	98	12	.11	.44	.33	.86	.03	.00
JUN											
06...	--	--	--	143	9	.15	.64	.49	1.1	.04	.00
27...	--	--	--	--	4	.22	.72	.50	1.5	.06	--
JUL											
25...	--	--	--	178	10	.16	1.2	1.0	1.5	.05	--
AUG											
23...	--	--	--	218	1	.37	1.1	.73	1.6	.05	--

E Estimated.

K Results based on colony count outside the acceptable range (non-ideal colony count).

01354160 MOHAWK RIVER AT LOCK 10 AT CRANSVILLE, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	ARSENIC TOTAL (UG/L AS AS)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)	OIL AND GREASE (MG/L)
OCT											
27...	0	2	20	5	610	18	<.5	10	8.0	--	0
NOV											
15...	1	1	20	6	1200	0	<.5	10	18	--	0
DEC											
14...	1	0	40	6	780	3	<.5	20	11	--	2
MAR											
23...	2	0	20	8	4100	6	<.5	20	6.3	.00	0
APR											
18...	1	0	30	12	750	0	<.5	10	4.9	.00	5
MAY											
17...	1	0	10	5	1100	4	<.5	40	5.3	.00	0
JUN											
06...	2	0	20	6	370	2	<.5	20	10	.00	0
27...	2	1	10	2	240	10	<.5	10	8.2	--	0
JUL											
25...	1	3	10	7	220	4	<.5	20	--	--	1
AUG											
23...	1	2	<10	1	130	4	<.5	20	6.1	--	0

01354490 MOHAWK RIVER AT SCHENECTADY, NY

LOCATION.--Lat 42°49'06", long 73°57'04", Schenectady County, Hydrologic Unit 02020004, at new (1977) Schenectady-Scotia bridge, 0.5 mi (0.8 km) upstream from railroad bridge, and 1.0 mi (1.6 km) upstream from Collins Creek.

DRAINAGE AREA.--3,302 mi² (8,552 km²).

PERIOD OF RECORD.--Water years 1969 to current year.
CHEMICAL DATA: 1969 (d), 1970-72 (e), 1973 (d), 1974 (e), 1975 (d), 1976-77 (b), 1978 (d).
MINOR ELEMENTS DATA: 1972 (c), 1973 (b), 1974-75 (d), 1976-77 (c), 1978 (d).
ORGANIC DATA: TOC--1974 (c), 1975 (d), 1976-77 (c), 1978 (d).
NUTRIENT DATA: 1969 (d), 1970-74 (e), 1975 (d), 1976-77 (c), 1978 (d).
BIOLOGICAL DATA:
Coliform bacteria--1977 (c), 1978 (d).

REMARKS.--Water-discharge data are based on records for 01357499 diversion from Mohawk River at Crescent Dam, and 01357500 Mohawk River at Cohoes. Prior to January 1977, sampling site was 0.2 mi (0.3 km) upstream.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, CHEM-ICAL (LOW LEVEL) (MG/L)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	CAR-BONATE (MG/L AS CO3)
OCT 27...	1000	E5940	235	7.6	9.5	10	11.6	105	10	--	K136	--
NOV 16...	1530	E8580	235	7.7	6.5	15	13.2	108	9	--	K4200	--
DEC 14...	1200	E6780	300	7.2	.0	4.0	14.2	100	5	--	K19800	--
JAN 26...	1100	E8470	280	6.4	.0	7.0	13.2	100	15	--	K1800	--
FEB 15...	1200	E5210	250	6.2	1.0	4.0	13.6	96	38	--	K72	--
MAR 23...	1300	E28000	220	7.4	1.0	75	14.5	104	15	--	K7500	0
APR 19...	1030	E8730	185	6.5	6.5	10	12.6	103	10	--	1800	--
MAY 17...	1130	E12900	155	6.5	12.0	10	11.1	103	15	--	2100	0
JUN 06...	1730	E2840	255	7.5	22.0	3.0	9.5	106	15	--	K33	--
27...	0800	E2510	250	7.4	21.0	4.0	8.7	99	--	25	K450	--
JUL 26...	0800	E1060	310	7.9	24.5	--	7.6	89	--	72	940	--
AUG 23...	0900	E1110	268	8.1	25.5	3.0	8.0	95	--	20	235	--

DATE	BICAR-BONATE (MG/L AS HCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)
OCT 27...	--	--	--	135	20	.16	.54	.38	1.0	.03	.00
NOV 16...	--	--	--	130	31	.10	.40	.30	.86	.05	.01
DEC 14...	--	--	--	180	17	--	--	--	--	--	--
JAN 26...	--	--	--	144	29	.24	.49	.25	1.2	.05	.01
FEB 15...	--	--	--	120	7	.30	.52	.22	1.2	.02	.01
MAR 23...	91	16	9.1	108	148	.17	.91	.74	1.7	.18	.02
APR 19...	--	--	--	104	12	.17	.46	.29	.86	.03	.00
MAY 17...	48	14	7.6	45	18	.19	.51	.32	.99	.04	.01
JUN 06...	--	--	--	172	0	.38	1.3	.92	1.9	.04	.01
27...	--	--	--	154	10	.14	.60	.46	1.2	.03	--
JUL 26...	--	--	--	196	10	.26	.64	.38	1.3	.05	--
AUG 23...	--	--	--	156	7	.11	.66	.55	1.1	.03	--

E Estimated.

K Results based on colony count outside the acceptable range (non-ideal colony count).

01354490 MOHAWK RIVER AT SCHENECTADY, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	ARSENIC TOTAL (UG/L AS AS)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	OIL AND GREASE (MG/L)
OCT											
27...	3	0	20	6	680	16	<.5	10	8.4	--	0
NOV											
16...	1	1	30	7	1000	0	<.5	20	11	--	0
DEC											
14...	1	0	20	7	400	8	<.5	20	10	--	2
JAN											
26...	0	0	<10	7	40	3	<.5	20	12	.00	1
FEB											
15...	1	0	<10	7	400	0	<.5	10	8.6	.00	1
MAR											
23...	1	0	30	11	5000	10	<.5	30	6.5	.00	0
APR											
19...	1	0	40	4	650	1	<.5	10	4.5	.00	1
MAY											
17...	0	0	20	5	1100	4	<.5	20	7.9	.00	0
JUN											
06...	2	0	10	5	250	0	<.5	30	9.2	.00	0
27...	1	0	<10	2	--	4	<.5	20	6.5	--	1
JUL											
26...	1	0	<10	27	530	3	<.5	20	5.9	--	0
AUG											
23...	1	2	10	1	140	4	<.5	20	6.0	--	0

01357500 MOHAWK RIVER AT COHOES, NY

LOCATION.--Lat 42°47'07", long 73°42'29", Albany County, Hydrologic Unit 02020004, on right bank at Niagara Mohawk Power Corp. School Street powerplant in Cohoes, and 2.0 mi (3.2 km) upstream from mouth. Water-quality sampling site at bridge on State Highway 32, 0.7 mi (1.1 km) downstream from discharge station.

DRAINAGE AREA.--3,456 mi² (8,951 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--December 1917 to current year. Monthly discharge only for some periods, published in WSP 1302. Prior to July 17, 1925, published as "at Crescent Dam".

REVISED RECORDS.--WSP 741: Drainage area. WSP 1302: 1919-23 (M).

GAGE.--Water-stage recorder. Datum of gage is 49.13 ft (14.975 m) National Geodetic Vertical Datum of 1929. Dec. 1, 1917, to July 16, 1925, water-stage recorder at site 1.7 mi (2.74 km) upstream at Crescent Dam at datum 130.87 ft (39.889 m) higher. July 17 to Oct. 19, 1925, powerplant gage at present site.

REMARKS.--Records fair. Total flow of Mohawk River equals flow published at Cohoes which includes small diversion for Cohoes water supply plus flow diverted at Cresent Dam to Barge Canal through Lock 6. Prior to 1925 records published as total flow. See Diversions in Hudson River Basin for regulation and diversions upstream from this station.

COOPERATION.--Diversions through Barge Canal at Lock 6 furnished by New York State Department of Transportation.

AVERAGE DISCHARGE.--7 years (1919-25), 5,820 ft³/s (164.8 m³/s), includes diversion at Lock 6; 53 years (1926-78), 5,753 ft³/s (162.9 m³/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 143,000 ft³/s (4,050 m³/s) Mar. 6, 1964, result of release from ice jam, gage height, 23.15 ft (7.056 m), from rating curve extended above 100,000 ft³/s (2,830 m³/s); minimum, 6 ft³/s (0.17 m³/s) Sept. 18, 1941, gage height, 3.40 ft (1.036 m); minimum daily, 23 ft³/s (0.65 m³/s) Aug. 24, 1941.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 41,000 ft³/s (1,160 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 18	0230	*70,900	2,008	*19.36	5.901	Mar. 28	1330	42,200	1,195	17.14	5.224
Nov. 9	1830	57,000	1,614	18.39	5.605	Apr. 2	1045	44,300	1,255	17.35	5.288

Minimum discharge, 217 ft³/s (6.15 m³/s) July 15, gage height, 5.33 ft (1.625 m); minimum daily, 740 ft³/s (20.96 m³/s) Sept. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8980	4610	15600	6230	9390	3340	21700	7330	3250	1680	1260	1240
2	28800	4500	28900	5190	9350	3380	39500	5190	3260	1410	1490	960
3	22500	4890	21400	5160	7470	3230	26300	5090	3660	1750	1400	926
4	14900	4260	16300	4990	6680	3010	19300	4500	3960	1670	2320	917
5	12300	3960	12500	4750	5820	3340	22800	4520	3120	2680	2420	1130
6	8210	4920	12700	5390	5240	2470	24900	4520	2840	2040	1400	1240
7	6500	4680	13200	5390	5340	2350	21900	4430	2890	1800	1470	997
8	6290	12300	12200	5060	5570	2670	21700	4520	4750	1400	2380	978
9	6680	48300	9090	12400	5940	2880	17700	5340	7170	1340	3430	871
10	17700	27300	7400	33400	5660	2790	14900	11200	6870	1280	2510	740
11	16400	28500	5390	26300	5260	2830	14200	10200	4210	966	2360	1050
12	12800	23600	4700	15300	5160	3010	18800	5630	3410	981	2150	1450
13	9510	15700	4150	11500	5390	3230	23400	6020	3680	1030	2000	4370
14	6720	11400	6780	10100	5240	3530	22600	5820	2760	1010	2090	3460
15	9280	8320	17200	9130	5210	4500	19100	6140	3470	907	1630	2060
16	12300	8580	25400	7780	5010	8130	14500	9740	3010	1170	1240	2240
17	37700	8280	20900	7170	4680	9430	12100	12900	2650	2000	961	1660
18	61600	9590	16300	6680	4630	7640	11000	12900	2090	2050	1180	2060
19	30200	10000	13100	5140	4750	6530	8730	10900	3980	1400	1030	2160
20	20800	8870	10900	6380	4150	6350	8130	8800	4280	1600	827	6490
21	15300	8320	9390	6080	3860	6910	13300	7530	3210	1470	1000	4040
22	11800	11600	9900	4940	3820	14800	13200	6050	3230	1490	1090	2280
23	9550	10600	9470	5990	3410	28000	11200	5740	4840	937	1110	2540
24	8570	9510	8280	6140	3280	29200	9590	5600	3760	976	964	2150
25	6640	9390	8280	5880	3400	22400	7470	4870	2700	966	1020	1930
26	5680	10100	10100	8470	3360	17100	6910	3490	1970	1060	1160	1470
27	5940	12000	9170	23200	3700	17900	7880	3120	2510	1100	1050	1540
28	5160	9550	6810	25400	3210	36300	9470	2790	2480	1620	1040	1400
29	3840	7530	5940	18700	---	28300	9170	3010	2310	2440	969	1460
30	4210	7330	5420	13900	---	25200	8690	2960	2310	1990	1090	1580
31	5520	---	5600	11000	---	21000	---	2680	---	1520	1030	---
TOTAL	432380	348490	362470	323140	142980	331750	480140	193530	104630	45733	47071	57389
MEAN	13950	11620	11690	10420	5106	10700	16000	6243	3488	1475	1518	1913
MAX	61600	48300	28900	33400	9390	36300	39500	12900	7170	2680	3430	6490
MIN	3840	3960	4150	4750	3210	2350	6910	2680	1970	907	827	740

CAL YR 1977 TOTAL 3161965 MEAN 8663 MAX 97800 MIN 860
WTR YR 1978 TOTAL 2869703 MEAN 7862 MAX 61600 MIN 740

01357500 MOHAWK RIVER AT COHOES, NY--Continued

(01357499) Diversion, in cubic feet per second, from Mohawk River at Cresent Dam, NY, through Barge Canal at lock 6, water year October 1977 to September 1978

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	118	106	106	3.0	3.0	3.0	3.0	108	84	150	114	132
2	118	118	100	3.0	3.0	3.0	3.0	102	102	144	144	138
3	100	124	82	3.0	3.0	3.0	3.0	108	120	132	90	138
4	106	118	88	3.0	3.0	3.0	3.0	84	114	126	108	138
5	118	106	88	3.0	3.0	3.0	3.0	78	102	126	120	138
6	142	112	142	3.0	3.0	3.0	3.0	90	114	120	96	96
7	118	100	112	3.0	3.0	3.0	3.0	126	132	132	90	102
8	130	100	94	3.0	3.0	3.0	3.0	114	102	138	126	120
9	130	82	118	3.0	3.0	3.0	3.0	102	108	132	162	126
10	100	88	124	3.0	3.0	3.0	3.0	90	144	114	126	114
11	82	82	130	3.0	3.0	3.0	3.0	102	126	120	114	120
12	94	88	88	3.0	3.0	3.0	3.0	120	120	108	120	96
13	136	82	88	3.0	3.0	3.0	3.0	120	102	120	126	108
14	106	118	88	3.0	3.0	3.0	3.0	120	90	120	132	114
15	136	136	88	3.0	3.0	3.0	3.0	120	114	126	144	138
16	130	106	94	3.0	3.0	3.0	3.0	102	120	120	138	138
17	100	94	94	3.0	3.0	3.0	601	96	114	108	114	108
18	82	100	94	3.0	3.0	3.0	144	96	108	126	102	120
19	94	112	3.0	3.0	3.0	3.0	72	102	96	150	132	126
20	88	106	3.0	3.0	3.0	3.0	72	126	114	120	138	126
21	100	88	3.0	3.0	3.0	3.0	102	108	90	114	132	114
22	106	68	3.0	3.0	3.0	3.0	72	138	108	132	114	114
23	106	124	3.0	3.0	3.0	3.0	72	120	126	132	96	120
24	112	112	3.0	3.0	3.0	3.0	84	132	120	102	126	108
25	118	88	3.0	3.0	3.0	3.0	84	114	126	114	114	150
26	130	100	3.0	3.0	3.0	3.0	78	108	108	120	120	138
27	136	112	3.0	3.0	3.0	3.0	84	138	144	102	138	108
28	100	100	3.0	3.0	3.0	3.0	84	114	108	144	138	144
29	100	106	3.0	3.0	---	3.0	78	120	132	114	132	114
30	112	94	3.0	3.0	---	3.0	78	120	108	96	132	120
31	106	---	3.0	3.0	---	3.0	---	108	---	114	138	---
TOTAL	3454	3090	1857.0	93.0	84.0	93.0	1753.0	3426	3396	3816	3816	3666
MEAN	111	103	59.9	3.00	3.00	3.00	58.4	111	113	123	123	122
MAX	142	136	142	3.0	3.0	3.0	601	138	144	150	162	150
MIN	82	82	3.0	3.0	3.0	3.0	3.0	78	84	96	90	96

CAL YR 1977 TOTAL 29841.0 MEAN 81.8 MAX 621 MIN 3.0
WTR YR 1978 TOTAL 28544.0 MEAN 78.2 MAX 601 MIN 3.0

01357500 MOHAWK RIVER AT COHOES, NY

REGULATION
(see Reservoirs in Hudson River Basin)

Delta Dam.
Hinckley Reservoir.
Schoharie Reservoir.

DIVERSIONS
(see Reservoirs in Hudson River Basin)

From Chenango River basin through Oriskany Creek Feeder.

From (and occasionally into) Oswego River basin through summit level of Erie (Barge) Canal between New London and Utica.

From Black River basin through Black River Canal during navigation period.

Into Esopus Creek from Schoharie Reservoir through Shandaken Tunnel for New York City water supply.

01358000 HUDSON RIVER AT GREEN ISLAND, NY

REGULATION

Great Sacandaga Lake at Conklingville (see station 01323500).
Indian Lake near Indian Lake (see station 01314500).
Mohawk River regulation listed under Mohawk River at Cohoes.

DIVERSIONS

Mohawk River diversions listed under Mohawk River at Cohoes.

Into St. Lawrence River basin through:
- Glens Falls feeder at Dunham Basin (see station 01327500).
- Bond Creek at Dunham Basin (see station 01328000).
- Champlain (Barge) Canal (see station 01327500).

From St. Lawrence River basin through summit level of Champlain (Barge) Canal at Dunham Basin.

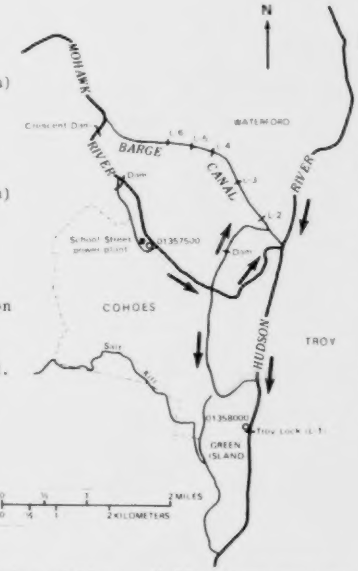


Figure 7.--Gaging stations and diversions near mouth of Mohawk River.

01357500 MOHAWK RIVER AT COHOES, NY--Continued

WATER QUALITY RECORDS

PERIOD OF RECORD.--Water years 1954-59, 1970, 1976 to current year.
CHEMICAL DATA: 1955 (a), 1957 (a), 1958-59 (b), 1970 (a), 1977 (b), 1978 (d).
MINOR ELEMENTS DATA: 1976 (a), 1977 (c), 1978 (d).
PESTICIDE DATA: 1976 (a), 1977 (c).
ORGANIC DATA: TOC--1976 (a), 1977 (c), 1978 (d).
PCB--1976 (a), 1977 (c).
NUTRIENT DATA: 1970 (a), 1976 (a), 1977 (c), 1978 (d).
BIOLOGICAL DATA:
Coliform bacteria--1977 (c), 1978 (d).
SEDIMENT DATA: 1956 (d), 1958-59 (b), 1976 (c), 1977 (e), 1978 (a).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: January 1954 to June 1959, unpublished.
pH: January 1954 to April 1956, unpublished.
WATER TEMPERATURES: May 1956 to June 1959.
SUSPENDED-SEDIMENT DISCHARGE: January 1954 to June 1959, August 1976 to March 1978 (discontinued).

EXTREMES FOR PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum daily mean, 1,230 mg/L Oct. 17, 1955; minimum daily mean, 1 mg/L Jan. 6, 1956, Jan. 6, 7, Feb. 21, 22, 25, 1977.
SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 300,000 tons (272,000 Mg) Oct. 17, 1955; minimum daily, 0.8 tons (0.7 Mg) Aug. 7, 1955.

EXTREMES FOR CURRENT YEAR.--
SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum daily mean, 467 mg/L Oct. 18; minimum daily mean, 2 mg/L Feb. 26, Mar. 8.
SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 77,700 tons (70,500 Mg) Oct. 18; minimum daily, 14 tons (12.7 Mg) Mar. 8.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAMFLOW (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (NTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	CARBONATE (MG/L AS CO3)
OCT 27...	0900	5940	220	7.1	9.5	9.0	11.6	103	20	--	100	--
NOV 16...	1230	8580	225	7.8	7.0	20	13.1	107	10	--	K1700	--
DEC 14...	1400	6780	270	7.4	.0	5.0	14.8	101	7	--	11400	--
JAN 26...	1500	8470	262	6.9	.0	5.0	15.2	104	9	--	K2600	--
FEB 15...	1030	5210	255	6.0	.5	3.0	14.2	100	6	--	280	--
MAR 23...	1500	28000	220	7.5	1.0	85	16.2	117	15	--	1300	0
APR 19...	1300	8730	170	6.4	7.0	10	13.4	110	8	--	1000	--
MAY 17...	0900	12900	185	6.9	13.0	15	11.2	106	20	--	200	0
JUN 06...	0700	2840	220	7.0	20.0	7.0	8.7	94	15	--	K300	--
27...	0930	2510	275	7.3	22.0	7.0	9.0	102	--	15	K800	--
JUL 26...	0930	1060	280	7.0	25.0	1.0	6.5	76	--	25	K1600	--
AUG 23...	1630	1110	310	7.9	26.5	2.0	7.6	94	--	15	K50	--

K Results based on colony count outside the acceptable range (non-ideal colony count).

01357500 MOHAWK RIVER AT COHOES, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	BICAR- BONATE (MG/L AS HCO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS- PENDED (MG/L)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)
OCT											
27...	--	--	--	138	13	.09	.41	.32	.87	.04	.01
NOV											
16...	--	--	--	129	35	.06	.38	.32	.82	.06	.01
DEC											
14...	--	--	--	170	15	--	--	--	--	--	--
JAN											
26...	--	--	--	134	7	.20	.40	.20	1.2	.04	.01
FEB											
15...	--	--	--	140	2	.30	.53	.23	1.3	.02	.01
MAR											
23...	90	18	11	114	107	.21	1.1	.89	1.8	.16	.00
APR											
19...	--	--	--	95	17	.12	.30	.18	.86	.05	.01
MAY											
17...	62	16	10	124	21	.28	.76	.48	1.3	.07	.01
JUN											
06...	--	--	--	129	5	.33	.80	.47	1.3	.06	.01
27...	--	--	--	173	22	.23	.80	.57	1.4	.72	--
JUL											
26...	--	--	--	177	0	.39	.74	.35	1.2	.04	--
AUG											
23...	--	--	--	197	2	.26	.67	.41	1.1	.05	--

DATE	ARSENIC TOTAL (UG/L AS AS)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)	OIL AND GREASE (MG/L)
OCT											
27...	1	0	<10	9	1100	20	<.5	20	7.4	--	0
NOV											
16...	1	1	30	6	1200	0	<.5	90	9.4	--	0
DEC											
14...	2	0	20	6	410	5	<.5	20	13	--	3
JAN											
26...	0	0	<10	8	0	0	<.5	20	9.7	.00	1
FEB											
15...	0	0	<10	4	340	1	<.5	10	4.6	.00	0
MAR											
23...	1	0	40	9	4700	10	<.5	30	5.0	.00	0
APR											
19...	1	0	10	7	1000	2	<.5	10	8.0	.00	0
MAY											
17...	1	0	30	10	1200	6	<.5	40	8.1	.00	1
JUN											
06...	2	0	20	6	960	6	<.5	30	8.7	.00	0
27...	3	0	20	4	--	5	<.5	10	7.1	--	0
JUL											
26...	2	1	<10	7	420	2	<.5	20	6.7	--	0
AUG											
23...	1	2	<10	0	190	8	<.5	20	23	--	0

01357500 MOHAWK RIVER AT COHOES, NY--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM
OCT , 1977							
17...	69300	404	75600	37	53	71	78
MAR , 1978							
28...	40900	174	19200	34	47	64	81

DATE	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM
OCT , 1977						
17...	91	95	97	98	99	100
MAR , 1978						
28...	92	98	100	--	--	--

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	24	582	17	212	46	1940	20	336	8	203	14	126
2	46	3580	18	219	15	1170	26	364	8	180	4	37
3	31	1880	18	238	37	2140	20	279	11	222	7	61
4	20	805	18	207	37	1630	20	269	10	180	9	73
5	24	797	20	214	25	844	15	192	15	236	10	90
6	22	488	18	239	17	583	12	175	10	141	6	40
7	34	597	16	202	11	392	10	146	7	101	6	38
8	45	764	19	631	11	362	3	41	15	226	2	14
9	24	433	215	29800	17	417	36	1210	8	128	16	124
10	20	956	269	21200	20	400	119	10700	16	245	15	113
11	21	930	150	11500	15	218	82	5820	12	170	10	76
12	12	415	82	5230	15	190	55	2270	10	139	10	81
13	9	231	48	2030	15	168	30	931	15	218	5	44
14	15	272	40	1230	20	366	15	409	4	57	8	76
15	15	376	28	629	32	1490	9	222	15	211	10	121
16	15	498	23	533	86	5900	10	210	5	68	18	395
17	126	20200	25	559	25	1410	8	155	5	63	11	280
18	467	77700	32	829	25	1100	10	180	3	38	12	248
19	160	13000	27	729	20	707	10	139	5	64	17	300
20	92	5170	19	455	10	294	10	172	5	56	14	240
21	46	1900	17	382	12	304	13	213	23	240	8	149
22	40	1270	15	470	15	401	17	227	15	155	28	1120
23	35	902	21	601	21	537	15	243	31	285	119	9000
24	26	602	29	745	9	201	6	99	26	230	116	9150
25	25	448	20	507	7	156	5	79	5	46	90	5440
26	15	230	15	409	25	682	5	114	2	18	54	2490
27	22	353	17	551	20	495	37	2320	6	60	33	1590
28	19	265	15	387	20	368	65	4460	3	26	183	17900
29	24	249	15	305	15	241	25	1260	---	---	113	8630
30	24	273	10	198	15	220	15	563	---	---	55	3740
31	16	238	---	---	13	197	8	238	---	---	35	1980
TOTAL	---	136404	---	81441	---	25523	---	34036	---	4006	---	63766

01358000 HUDSON RIVER AT GREEN ISLAND, NY
(National stream-quality accounting network station)
(National pesticide network station)

LOCATION.--Lat 42°45'08", long 73°41'22", Albany County, Hydrologic Unit 02020003, on right bank at Green Island, just upstream from Troy lock and dam, and 0.5 mi (0.8 km) downstream from 5th branch Mohawk River. Water-quality sampling site at bridge on State Highway 7, 1.7 mi (2.7 km) downstream from discharge station.

DRAINAGE AREA.--8,090 mi^2 (20,953 km^2), approximately (including that above site of former auxiliary gage).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1946 to current year.

GAGE.--Water-stage recorder. Datum of gage is 0.31 ft (0.094 m) National Geodetic Vertical Datum of 1929 (Corps of Engineers bench mark). From July 1, 1946 to Mar. 12, 1962 auxiliary water-stage recorder on bypass channel at datum 10.59 ft (3.228 m) higher.

REMARKS.--Records fair. Records include flow over spillway, estimates of flow through lock, and flow through powerplant. Powerplant, located on right bank just downstream from gage, was inoperative from Nov. 20, 1960 to Feb. 23, 1971. See Diversions in Hudson River Basin for regulation and diversions upstream from this station.

AVERAGE DISCHARGE.--32 years, 13,840 ft^3/s (391.9 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 181,000 ft^3/s (5,130 m^3/s) Dec. 31, 1948, gage height, 27.05 ft (8.245 m), from high-water mark in gage well; maximum daily, 152,000 ft^3/s (4,305 m^3/s) Mar. 14, 1977; minimum daily, 882 ft^3/s (25.0 m^3/s) Sept. 2, 1968; minimum gage height 13.92 ft (4.243 m) Sept. 2, 1946.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 19, 1936, reached a stage of 29.48 ft (8.986 m) at gage on opposite bank, from information by Corps of Engineers (discharge, 215,000 ft^3/s or 6,090 m^3/s). Flood of Mar. 28, 1913, prior to construction of Sacandaga Reservoir and Troy lock and dam, reached a stage about 0.2 ft (0.06 m) higher upstream from former dam near same site. Downstream from dams, flood in 1913 was about 3.3 ft (1.01 m) higher than flood in 1936, from information by Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 104,000 ft^3/s (2,945 m^3/s) Oct. 18, gage height, 22.72 ft (6.925 m); minimum daily, 2,740 ft^3/s (77.6 m^3/s) July 10; minimum gage height, 14.53 ft (4.429 m) July 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20500	14400	29400	17500	24800	11500	37700	24100	10200	5150	5610	4320
2	45700	15300	47900	13700	22500	11800	59900	20000	10100	5140	5960	5230
3	40700	15700	39000	13800	20300	10100	44800	17400	11200	3640	6750	5260
4	33700	14700	30600	15100	18100	10000	35500	15500	12900	4390	8650	3990
5	28100	12800	25900	17100	16000	10000	38000	14800	8810	3360	8490	3280
6	21900	14400	26700	16400	14400	8180	42600	14600	8940	5400	5960	4390
7	19500	12100	27900	15900	14000	9650	38300	14000	10000	4140	6080	5550
8	17600	21800	26100	15600	15000	10300	37900	14100	12100	4190	7450	4420
9	17000	59900	23900	31200	14600	11300	32600	15400	18600	4020	10500	4370
10	34800	41900	21300	66500	14800	10800	28300	24900	19400	2740	5880	4010
11	32000	40100	19100	46700	14700	9350	27400	28400	14500	5010	6260	3990
12	27500	37800	15500	38200	13700	8470	34600	22800	9850	3780	5950	6280
13	23500	29400	15500	32800	15000	8900	42500	21800	11400	4020	7360	12400
14	20500	22300	19700	28700	15100	11700	45900	21000	10300	2950	7440	10600
15	22600	20300	39800	26600	14000	16900	42700	20500	9800	2990	5070	8780
16	26000	20900	48500	24700	13300	20700	34900	25300	9170	2960	4800	8040
17	53300	21200	40700	22200	14000	20900	29700	29300	9590	3930	7060	6520
18	95400	24900	34600	20600	13500	17800	27700	31600	8310	5900	5500	5680
19	60800	24700	25900	19100	13300	15600	24500	28500	8850	5970	5270	7720
20	49100	22600	27400	18400	12000	13300	25400	25100	9720	6570	5250	11800
21	38700	17400	23000	17800	10100	17200	32400	21500	9110	5500	4280	8770
22	30200	23300	24300	16600	9760	29800	31900	17100	9410	5450	5200	6200
23	26600	24700	23100	17100	11000	43500	28600	18600	10100	5020	5120	6280
24	25900	23700	21400	18400	10500	45100	27200	18300	9290	2790	4760	5560
25	23200	23700	22300	17600	11400	41900	24700	16000	8210	3470	4800	4630
26	19200	21800	27700	29600	10400	28700	24200	13300	3660	4460	5100	5510
27	19400	25000	24300	53300	8720	32000	25300	12400	7340	5700	4870	5310
28	17200	19700	19900	48100	10300	63800	27700	10700	7400	5980	4250	5540
29	14600	20000	18800	37300	---	49200	27400	7900	5180	7400	5400	6280
30	15600	16800	16300	31400	---	42500	26600	7320	5190	6790	4340	5140
31	13600	---	14500	27500	---	37100	---	8430	---	5120	5650	---
TOTAL	934400	703300	821000	815500	395280	678050	1006900	580650	298630	143930	185260	185850
MEAN	30140	23440	26480	26310	14120	21870	33560	18730	9954	4643	5976	6195
MAX	95400	59900	48500	66500	24800	63800	59900	31600	19400	7400	10500	12400
MIN	13600	12100	14500	13700	8720	8180	24200	7320	3660	2740	4250	3280

CAL YR 1977 TOTAL 6992100 MEAN 19160 MAX 152000 MIN 3220
WTR YR 1978 TOTAL 6748750 MEAN 18490 MAX 95400 MIN 2740

01358000 HUDSON RIVER AT GREEN ISLAND, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1955 to current year.
CHEMICAL DATA: 1963 (a), 1964-65 (e), 1966-77 (d), 1978 (c).
MINOR ELEMENTS DATA: 1970-71 (a), 1972-73 (b), 1975-78 (b).
RADIOLOGICAL DATA: 1968-71 (c), 1973-75 (a), 1976 (d), 1977 (a), 1978 (b).
PESTICIDE DATA: 1976-77 (b), 1978 (a).
ORGANIC DATA: TOC--1974 (a), 1975 (c), 1976-77 (b), 1978 (a).
PCB--1978 (a).
NUTRIENT DATA: 1968 (b), 1969-76 (d), 1977-78 (c).
BIOLOGICAL DATA:
Coliform bacteria--1971 (a), 1973-74 (d), 1975 (a), 1976-78 (c).
Phytoplankton--1975 (a), 1976-77 (c), 1978 (b).
Periphyton--1976-77 (b), 1978 (a).
SEDIMENT DATA: 1975 (b), 1976 (d), 1977 (b), 1978 (c).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1964 to September 1965, once-daily measurements, unpublished.
pH: October 1964 to September 1965, once-daily measurements, unpublished.
WATER TEMPERATURES: April 1947 to September 1954, once-daily measurements, unpublished; October 1954 to current year.

REMARKS.--Daily water-temperature measurements (at 0800 hours) made at Troy lock and dam. Prior to October 1968 sampling site at old bridge on State Highway 7 about 100 ft (33 m) upstream, and between April 1971 and September 1973 sampling site at bridge on road between Green Island and Troy at Starbuck Island. No record Dec. 11 to Apr. 9 (stream frozen during winter period).

COOPERATION.--Water-temperature record furnished by the Corps of Engineers.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum daily (water years 1947-76, 1978), 29.0°C Aug. 8, 9, 1949; minimum daily, freezing point on many days during most winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum daily, 27.0°C June 12, 13; minimum daily, freezing point on many days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TUR-BID-ITY (JTU)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)
OCT												
20...	1200	49100	140	6.7	30	--	11.1	107	K100000	6600	61	20
NOV												
22...	1130	23300	190	7.9	1	--	13.8	111	3500	K500	82	13
MAR												
27...	1130	32000	180	7.3	--	--	14.6	105	3100	K180	71	71
APR												
27...	1100	25300	120	6.8	6	--	12.0	103	8100	K70	47	11
MAY												
31...	1130	8430	125	6.4	5	--	9.0	106	22000	K50	52	20
JUN												
22...	1300	9410	190	7.5	--	8.0	8.7	100	K3400	K70	71	18
JUL												
13...	1200	4020	185	7.9	--	3.0	8.6	102	K800	K33	71	23
27...	1130	5700	185	7.0	--	2.0	9.0	110	17500	62	68	21
AUG												
22...	1230	5200	195	7.6	--	3.0	8.4	100	--	K300	83	28

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)
OCT												
20...	19	3.3	3.6	1.0	50	0	41	14	5.0	.1	5.2	83
NOV												
22...	26	4.2	5.8	1.2	85	0	70	18	7.4	.0	5.0	121
MAR												
27...	22	3.9	6.2	1.1	--	0	--	--	--	--	--	--
APR												
27...	15	2.3	3.7	.7	44	0	36	12	4.7	.1	4.6	68
MAY												
31...	16	3.0	5.6	.7	40	0	33	16	9.5	.1	3.0	87
JUN												
22...	22	3.8	7.0	1.0	--	--	53	17	9.7	--	--	139
JUL												
13...	22	3.8	7.0	.9	--	--	48	16	11	.1	2.3	111
27...	21	3.8	7.9	1.3	--	--	47	22	12	.1	2.5	122
AUG												
22...	26	4.3	9.9	1.3	--	--	55	22	16	.1	2.6	144

K Results based on colony count outside the acceptable range (non-ideal colony count).

01358000 HUDSON RIVER AT GREEN ISLAND, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SOLIDS, RESIDUE AT 105 DEG. C, DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS- PENDED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)
OCT 20...	120	76	38	.35	.06	.47	.53	.23	.88	.08	.01
NOV 22...	--	110	--	.43	.10	.27	.37	.34	.80	.04	.02
MAR 27...	100	--	39	.68	.15	.35	.50	.51	1.2	.07	.02
APR 27...	--	65	--	.55	.10	.15	.25	.13	.80	.02	.01
MAY 31...	--	74	--	.42	.09	.34	.43	.32	.85	.03	.00
JUN 22...	--	--	--	.80	.13	.46	.59	.43	1.4	.06	.01
JUL 13...	--	92	--	.49	.04	.58	.62	.37	1.1	.06	.02
27...	--	99	--	.53	.05	1.1	1.1	.40	1.6	.04	.00
AUG 22...	--	115	--	.42	.01	.79	.80	.45	1.2	.05	.01

DATE	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	BARIUM, DIS- SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV- ERABLE (UG/L AS CO)
OCT 20...	0	0	0	0	1	0	<10	0	2
MAR 27...	1	1	0	0	0	1	20	1	0
JUL 13...	0	0	0	0	0	0	10	1	0

DATE	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
OCT 20...	0	14	4	2500	130	18	0	80	10
MAR 27...	0	12	3	2100	50	16	2	70	30
JUL 13...	0	4	5	400	180	0	0	60	0

DATE	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY DIS- SOLVED (UG/L AS HG)	SELE- NIUM, TOTAL (UG/L AS SE)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	SILVER, DIS- SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT 20...	<.5	<.5	0	0	0	0	30	0
MAR 27...	<.5	<.5	0	0	1	0	40	10
JUL 13...	.5	.5	0	0	0	0	40	10

01358000 HUDSON RIVER AT GREEN ISLAND, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)	PCB, TOTAL (UG/L)	ATRA-ZINE, TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR-DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)
MAR 27...	5.4	1.0	ND	ND	ND	ND	ND	ND	ND

DATE	DI-AZINON, TOTAL (UG/L)	DI-ELDRIN TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	ETHION, TOTAL (UG/L)	HEPTA-CHLOR, TOTAL (UG/L)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	MALA-THION, TOTAL (UG/L)	METH-OXY-CHLOR, TOTAL (UG/L)
MAR 27...	ND	ND	ND	ND	ND	ND	ND	ND	ND

DATE	METHYL PARA-THION, TOTAL (UG/L)	METHYL TRI-THION, TOTAL (UG/L)	PARA-THION, TOTAL (UG/L)	SIMA-ZINE TOTAL COUL-SON COND. (UG/L)	TOX-APHENE, TOTAL (UG/L)	TOTAL TRI-THION (UG/L)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	SILVEX, TOTAL (UG/L)
MAR 27...	ND	ND	ND	ND	ND	ND	ND	ND	ND

DATE	GROSS ALPHA, DIS-SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	RADIUM 226, DIS-SOLVED, RADON METHOD (PCI/L)	URANIUM DIS-SOLVED, EXTRAC-TION (UG/L)
OCT 20...	<1.5	1.7	2.9	2.6	2.6	2.6	.06	.12
MAR 27...	<.8	2.4	3.7	4.8	3.3	4.6	.04	.09
JUL 13...	<1.1	<.4	2.5	<.4	2.4	<.4	.12	.20

ND Material specifically analyzed for, but not detected.

SUSPENDED-SEDIMENT MEASUREMENTS, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
OCT 20...	1200	49100	51	6760
NOV 22...	1130	23300	15	944
MAR 27...	1130	32000	47	4060
APR 27...	1100	25300	12	820
MAY 31...	1130	8430	9	205
JUN 22...	1300	9410	16	407
JUL 13...	1200	4020	5	54
27...	1130	5700	9	139
AUG 22...	1230	5200	5	70

01358000 HUDSON RIVER AT GREEN ISLAND, NY--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

PHYTOPLANKTON

DATE	NOV 22,77		JUN 22,78	
TIME	1130		1300	
TOTAL CELLS/ML	2500		3200	
DIVERSITY: DIVISION	0.6		0.9	
.CLASS	0.6		0.9	
..ORDER	1.0		1.7	
...FAMILY	1.1		2.1	
....GENUS	1.2		2.3	
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)				
.CHLOROPHYCEAE				
..CHLOROCOCCALES				
...CHARACIACEAE				
....SCHROEDERIA	*	0	--	-
...OOCYSTACEAE				
....TREUBARIA	*	0	--	-
...SCENEDESMACEAE				
....CRUCIGENIA	--	-	120	4
....SCENEDESMUS	--	-	120	4
..ZYGNEMATALES				
...DESMIDIACEAE				
....COSMARIUM	--	-	*	0
CHRYSOPHYTA				
.BACILLARIOPHYCEAE				
..CENTRALES				
...COSCINODISCACEAE				
....CYCLOTELLA	61	2	29	1
....MELOSIRA	120	5	1000#	32
..PENNALES				
...ACHNANTHACEAE				
....ACHNANTHES	*	0	--	-
....COCCONEIS	*	0	--	-
...CYMBELLACEAE				
....AMPHORA	*	0	--	-
....CYMBELLA	15	1	--	-
...DIATOMACEAE				
....DIATOMA	15	1	100	3
...FRAGILARIACEAE				
....ASTERIONELLA	15	1	1300#	40
....SYNEDRA	15	1	--	-
...GOMPHONEMATACEAE				
....GOMPHONEMA	*	0	--	-
...NAVICULACEAE				
....NAVICULA	15	1	150	5
...NITZSCHIACEAE				
....NITZSCHIA	31	1	29	1
CYANOPHYTA (BLUE-GREEN ALGAE)				
.CYANOPHYCEAE				
..HORMOGONALES				
...NOSTOCACEAE				
....ANABAENA	92	4	--	-
...OSCILLATORIACEAE				
....OSCILLATORIA	--	-	350	11
..CHROOCOCCALES				
...CHROOCOCCACEAE				
....GOMPHOSPHAERIA	2100#	83	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

PERIPHYTON

Dates of exposure	Length of exposure (days)	Biomass (g/m^2)		Chlorophyll a (mg/m^2)	Chlorophyll b (mg/m^2)	Sampling method
		Dry weight	Ash weight			
July 19 to Aug. 23	35	4.88	3.54	8.15	0.000	Polyethylene strip
Aug. 24 to Sept. 27	34	.315	.236	.400	.000	Polyethylene strip

01358000 HUDSON RIVER AT GREEN ISLAND, NY--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

(ONCE DAILY AT 0800)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14.0	10.0	5.0				---	10.0	22.0	23.0	25.0	22.0
2	14.0	10.0	5.0				---	8.0	22.0	23.0	24.0	22.0
3	---	10.0	5.0				---	8.0	23.0	24.0	24.0	23.0
4	---	10.0	5.0				---	8.0	21.0	24.0	24.0	23.0
5	---	10.0	5.0				---	9.0	15.0	22.0	23.0	23.0
6	---	10.0	5.0				---	10.0	15.0	23.0	23.0	23.0
7	---	10.0	.0				---	6.0	16.0	23.0	23.0	23.0
8	12.0	10.0	3.0				---	9.0	16.0	23.0	23.0	22.0
9	12.0	---	.0				---	9.0	16.0	25.0	24.0	21.0
10	12.0	---	.0				5.0	11.0	16.0	25.0	24.0	21.0
11	---	---	---				5.0	12.0	23.0	25.0	24.0	21.0
12	---	---	---				5.0	14.0	27.0	26.0	24.0	21.0
13	---	---	---				5.0	14.0	27.0	26.0	24.0	19.0
14	10.0	7.0	---				5.0	14.0	20.0	26.0	24.0	18.0
15	11.0	6.0	---				5.0	13.0	21.0	25.0	24.0	18.0
16	10.0	6.0	---				5.0	13.0	21.0	25.0	24.0	19.0
17	11.0	6.0	---				5.0	12.0	19.0	25.0	25.0	19.0
18	6.0	6.0	---				5.0	13.0	19.0	25.0	25.0	20.0
19	---	6.0	---				5.0	12.0	19.0	25.0	26.0	19.0
20	---	6.0	---				5.0	14.0	20.0	25.0	26.0	19.0
21	---	6.0	---				5.0	15.0	20.0	25.0	25.0	18.0
22	---	6.0	---				7.0	16.0	21.0	25.0	25.0	18.0
23	---	6.0	---				7.0	13.0	20.0	25.0	25.0	18.0
24	---	6.0	---				7.0	17.0	20.0	26.0	25.0	18.0
25	---	5.0	---				8.0	17.0	20.0	26.0	24.0	18.0
26	---	5.0	---				9.0	18.0	21.0	26.0	23.0	17.0
27	12.0	5.0	---				9.0	19.0	21.0	26.0	24.0	17.0
28	11.0	5.0	---				9.0	19.0	21.0	---	24.0	17.0
29	10.0	5.0	---				9.0	19.0	23.0	25.0	23.0	16.0
30	9.0	5.0	---				10.0	21.0	23.0	25.0	23.0	16.0
31	10.0	---	---				---	22.0	---	25.0	23.0	---
MEAN	11.0	7.0	3.5				6.5	13.5	20.5	24.5	24.0	19.5

WTR YR 1978 MEAN 16.0 MAX 27.0 MIN .0

01359519 NORMANS KILL NEAR WESTMERE, NY

LOCATION.--Lat 42°40'43", long 73°54'25", Albany County, Hydrologic Unit 02020006, on right bank, 100 ft (30 m) upstream from bridge on State Highway 155 (State Farm Road), 1.6 mi (2.6 km) southwest of Westmere, and 1.8 mi (2.9 km) southeast of Guilderland.

DRAINAGE AREA.--131 mi^2 (339 km^2).

PERIOD OF RECORD.--October 1967 to current year.

REVISED RECORDS.--WRD NY 1972: 1968(P), 1969(M), 1970(P).

GAGE.--Water-stage recorder. Altitude of gage is 130 ft (40 m), from topographic map.

REMARKS.--Records good except those above 1,000 ft^3/s (28 m^3/s), and those for winter periods, which are poor. Diversion above station for municipal supply by city of Watervliet and town of Guilderland.

AVERAGE DISCHARGE.--11 years, 176 ft^3/s (4.984 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,580 ft^3/s (158 m^3/s) Oct. 18, 1975, gage height, 11.86 ft (3.615 m); minimum, 5.0 ft^3/s (0.14 m^3/s) July 29, 1968.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,200 ft^3/s (62 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 17	1900	*4,860	138	*11.01	3.356
Nov. 8	2330	3,370	95.4	8.89	2.710
Jan. 9	1445	4,330	123	10.26	3.127
Jan. 27	0600	2,790	79.0	7.99	2.435
27	2245	2,390	67.7	7.36	2.243
Apr. 2	0400	2,860	80.9	8.10	2.469

Minimum discharge, 14 ft^3/s (0.40 m^3/s) Sept. 30, gage height, 1.51 ft (0.460 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	104	64	1100	100	228	50	1230	64	683	37	48	35
2	223	58	1200	96	196	50	1720	57	180	35	47	33
3	163	55	653	92	165	50	715	54	179	31	45	33
4	124	53	448	90	141	49	466	49	156	36	60	32
5	104	57	317	84	130	48	721	51	105	32	60	31
6	89	62	233	80	130	47	586	55	73	32	140	29
7	85	71	230	82	120	45	568	54	60	33	120	29
8	73	1060	208	87	120	44	516	52	97	34	50	28
9	85	1800	201	2440	120	44	384	54	333	36	43	27
10	135	632	174	981	120	44	341	56	341	36	42	28
11	106	864	157	470	110	45	352	50	146	35	44	29
12	87	489	161	360	110	50	529	50	93	32	43	33
13	71	337	163	250	100	75	457	53	98	32	42	29
14	67	254	203	190	94	124	375	55	89	32	41	28
15	112	198	838	160	84	283	273	243	63	34	41	27
16	143	198	687	150	76	400	214	492	52	35	41	27
17	2640	201	448	150	68	307	185	1180	45	35	39	25
18	1740	343	298	140	66	258	163	717	50	38	40	25
19	579	220	246	140	66	247	152	478	87	35	40	36
20	560	171	208	130	70	336	284	284	137	35	39	25
21	403	151	228	130	72	485	326	198	68	35	37	24
22	280	151	295	130	68	1350	230	143	53	35	37	18
23	210	133	257	140	60	1270	175	105	44	35	36	16
24	163	143	220	150	56	1220	144	87	41	33	38	16
25	137	135	254	185	54	660	122	80	38	31	39	16
26	119	236	286	908	54	481	109	67	36	30	36	15
27	106	236	194	2210	52	1200	97	57	39	31	35	15
28	97	167	155	940	52	1690	86	52	42	40	35	15
29	85	153	135	448	---	1280	80	48	39	50	35	15
30	76	157	120	337	---	1010	72	46	38	50	34	15
31	69	---	110	266	---	788	---	116	---	50	37	---
TOTAL	9035	8849	10427	12116	2782	14030	11672	5147	3505	1105	1464	754
MEAN	291	295	336	391	99.4	453	389	166	117	35.6	47.2	25.1
MAX	2640	1800	1200	2440	228	1690	1720	1180	683	50	140	36
MIN	67	53	110	80	52	44	72	46	36	30	34	15
†	6.72	7.85	11.6	6.57	7.18	6.97	7.37	7.66	6.97	7.77	7.26	7.39

CAL YR 1977 TOTAL 76595 MEAN 210 MAX 4360 MIN 12 † 7.38
WTR YR 1978 TOTAL 80886 MEAN 222 MAX 2640 MIN 15 † 7.61

† Diversion, equivalent in cubic feet per second, by city of Watervliet and town of Guilderland for water supply (figures furnished by city of Watervliet and town of Guilderland Water Departments).

01359560 HUDSON RIVER AT GLENMONT, NY

LOCATION.--Lat 42°35'43", long 73°45'43", Albany County, Hydrologic Unit 02020006, at Niagara Mohawk Glenmont Power Station (intake), 0.2 mi (0.3 km) downstream from lower mouth of Normans Kill, and 0.9 mi (1.4 km) southeast of Glenmont.

DRAINAGE AREA.--8,476 mi² (21,953 km²).

PERIOD OF RECORD.--Water years 1969 to current year.
CHEMICAL DATA: 1969 (d), 1970-74 (e), 1975 (d), 1976-77 (b), 1978 (d).
MINOR ELEMENTS DATA: 1971 (a), 1972 (c), 1973 (b), 1974-75 (d), 1976-77 (c), 1978 (d).
ORGANIC DATA: TOC--1974 (c), 1975 (d), 1976-77 (c), 1978 (d).
NUTRIENT DATA: 1969 (d), 1970-74 (e), 1975 (d), 1976-77 (c), 1978 (d).
BIOLOGICAL DATA:
Coliform bacteria--1977 (c), 1978 (d).

REMARKS.--Water-discharge data are based on records for 01358000 Hudson River at Green Island.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAMFLOW (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (NTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	CARBONATE (MG/L AS CO3)
OCT												
26...	1430	E19200	160	6.3	10.0	6.0	11.9	107	10	--	3500	--
NOV												
16...	0900	E20900	175	7.4	7.0	10	12.4	102	12	--	9600	--
DEC												
15...	0830	E39800	235	6.5	.0	4.0	14.8	100	9	--	84000	--
JAN												
27...	0930	E53300	210	6.4	.0	50	14.4	99	20	--	K60000	--
FEB												
16...	0900	E13300	180	7.6	.0	3.0	14.4	99	9	--	3000	--
MAR												
22...	0800	E29800	235	7.5	2.5	30	14.2	102	10	--	4600	0
APR												
20...	1200	E25400	150	6.5	7.0	9.0	11.4	93	10	--	2500	--
MAY												
16...	1400	E25300	144	6.9	13.0	4.0	10.2	96	15	--	K2400	0
JUN												
06...	1200	E8940	175	6.8	21.0	5.0	8.2	91	15	--	K2100	--
26...	1200	E3660	200	7.3	23.0	6.0	8.5	98	--	15	K174000	--
JUL												
26...	1400	E4460	208	6.7	27.0	3.0	6.7	82	--	26	K5500	--
AUG												
24...	0715	E4760	230	7.1	25.5	4.0	6.4	76	--	10	K1250	--

DATE	BICARBONATE (MG/L AS HCO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)
OCT											
26...	--	--	--	100	7	.05	.32	.27	.78	.04	.01
NOV											
16...	--	--	--	102	30	.07	.36	.29	.72	.03	.01
DEC											
15...	--	--	--	146	17	--	--	--	--	--	--
JAN											
27...	--	--	--	125	91	.21	.66	.45	1.3	.13	.02
FEB											
16...	--	--	--	114	25	.24	.50	.26	1.1	.03	.02
MAR											
22...	74	21	15	124	51	.27	.79	.52	1.5	.08	.02
APR											
20...	--	--	--	86	12	.14	.37	.23	.95	.05	.01
MAY											
16...	37	14	7.3	87	7	.14	.68	.54	1.2	.04	.00
JUN											
06...	--	--	--	104	0	.34	.76	.42	1.4	.05	.01
26...	--	--	--	120	14	.22	.78	.56	1.6	.03	--
JUL											
26...	--	--	--	134	11	.19	.80	.61	1.3	.08	--
AUG											
24...	--	--	--	136	2	.15	.47	.32	1.1	.08	--

E Estimated.

K Results based on colony count outside the acceptable range (non-ideal colony count).

01359560 HUDSON RIVER AT GLENMONT, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	ARSENIC TOTAL (UG/L AS AS)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)	OIL AND GREASE (MG/L)
OCT											
26...	0	2	10	6	620	19	<.5	20	5.6	--	0
NOV											
16...	0	1	<10	3	620	0	<.5	10	15	--	0
DEC											
15...	1	0	10	6	570	11	<.5	20	9.5	--	4
JAN											
27...	0	0	<10	12	4000	3	<.5	30	11	.00	2
FEB											
16...	0	0	<10	5	300	2	<.5	10	11	.00	1
MAR											
22...	1	0	10	4	2100	8	<.5	20	8.6	.00	2
APR											
20...	1	0	<10	5	690	1	<.5	10	9.2	.00	4
MAY											
16...	1	0	<10	4	500	2	<.5	20	8.2	.00	0
JUN											
06...	2	0	<10	6	600	2	<.5	40	8.6	.00	0
26...	2	0	10	5	--	5	<.5	50	8.4	--	0
JUL											
26...	1	1	10	11	570	7	<.5	20	9.6	--	1
AUG											
24...	1	1	10	2	400	5	<.5	30	6.3	--	1

01359750 MOORDENER KILL AT CASTLETON-ON-HUDSON, NY

LOCATION.--Lat 42°32'02", long 73°44'15", Rensselaer County, Hydrologic Unit 02020006, on left bank 800 ft (244 m) downstream from bridge on State Highway 150, 0.2 mi (0.3 km) east of village of Castleton-on-Hudson, 0.5 mi (0.8 km) downstream from unnamed tributary, and 1.2 mi (1.9 km) upstream from mouth.

DRAINAGE AREA.--32.6 mi^2 (84.4 km^2).

PERIOD OF RECORD.--October 1957 to current year.

GAGE.--Water-stage recorder. Datum of gage is 98.72 ft (30.090 m) National Geodetic Vertical Datum of 1929. Prior to Nov. 25, 1957, nonrecording gage at same site and datum.

REMARKS.--Records fair except those for winter periods, which are poor. Slight diurnal fluctuation of low flow by mills upstream and occasional regulation at dam 800 ft (244 m) upstream.

AVERAGE DISCHARGE.--21 years, 37.9 ft^3/s (1.073 m^3/s), 15.79 in/yr (401 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,350 ft^3/s (38.2 m^3/s) Jan. 22, 1959, gage height, 3.63 ft (1.106 m); maximum gage height, 4.02 ft (1.225 m) Jan. 27, 1976 (ice jam); minimum discharge, 0.30 ft^3/s (0.008 m^3/s) Aug. 9, 10, 1964, gage height, 0.25 ft (0.076 m); minimum daily, 1.0 ft^3/s (0.028 m^3/s) Sept. 6, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 400 ft^3/s (11 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 17	2100	451	12.8	2.34	0.713
Dec. 1	1400	400	11.3	2.23	.680
Jan. 9	1600	*923	26.1	3.16	.963
Jan. 16	1200	400	11.3	2.23	0.680
Jan. 26	1400	ice jam		*3.31	1.009
Mar. 27	1930	780	22.1	2.93	.893

Minimum discharge, 3.8 ft^3/s (0.11 m^3/s) Sept. 7, 9, gage height, 0.62 ft (0.189 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	28	317	45	90	22	135	23	12	6.8	7.3	6.4
2	54	27	226	40	88	22	157	21	12	6.8	6.8	5.5
3	41	25	138	40	86	21	102	20	15	6.8	6.4	4.8
4	36	25	115	39	80	21	87	18	18	8.4	9.6	4.8
5	29	51	91	38	76	20	91	19	14	7.9	9.0	4.4
6	27	62	85	35	72	20	81	22	12	7.3	18	4.4
7	29	54	79	31	68	19	77	20	12	7.3	17	4.1
8	23	199	73	33	66	19	71	19	22	7.3	17	4.4
9	34	192	64	400	62	19	61	23	24	6.8	11	4.4
10	50	115	64	301	60	18	54	53	24	6.8	8.4	4.4
11	37	118	64	150	56	19	56	34	16	6.4	6.8	4.8
12	29	85	62	100	54	23	71	26	12	6.4	6.8	6.4
13	24	75	80	80	52	33	61	23	14	5.9	6.8	5.1
14	25	71	120	70	50	79	51	22	15	5.9	6.4	4.8
15	57	68	313	64	48	199	45	30	12	5.9	5.9	5.1
16	47	87	178	62	43	151	42	34	10	5.9	5.9	5.1
17	270	94	122	58	38	90	40	42	9.6	6.4	5.9	5.1
18	305	138	91	56	34	76	39	43	11	6.4	5.9	5.1
19	149	94	79	56	32	78	42	38	20	5.9	5.1	11
20	278	73	69	56	33	110	64	30	21	5.9	5.1	7.3
21	172	64	125	56	32	196	61	34	16	5.9	5.1	5.9
22	111	62	199	58	33	305	48	30	29	5.9	5.1	5.9
23	85	54	118	60	27	218	40	24	18	5.9	4.8	5.5
24	68	51	91	72	23	192	37	24	14	5.9	5.5	5.1
25	57	47	143	240	22	122	34	26	10	5.9	5.9	5.1
26	51	146	132	480	22	102	31	22	9.6	5.5	5.1	5.1
27	47	132	102	350	22	409	29	17	9.6	5.9	5.1	5.1
28	42	87	94	250	22	387	28	16	9.0	8.4	5.1	5.1
29	37	73	86	120	---	214	26	14	8.4	6.8	5.1	5.1
30	33	71	76	100	---	151	25	12	7.3	7.3	4.8	5.1
31	30	---	60	94	---	120	---	12	---	6.8	6.4	---
TOTAL	2300	2468	3656	3634	1391	3475	1786	791	436.5	203.4	229.1	160.4
MEAN	74.2	82.3	118	117	49.7	112	59.5	25.5	14.6	6.56	7.39	5.35
MAX	305	199	317	480	90	409	157	53	29	8.4	18	11
MIN	23	25	60	31	22	18	25	12	7.3	5.5	4.8	4.1
CFSM	2.28	2.53	3.62	3.59	1.53	3.44	1.83	.78	.45	.20	.23	.16
IN.	2.62	2.82	4.17	4.15	1.59	3.97	2.04	.90	.50	.23	.26	.18

CAL YR 1977 TOTAL 21442.3 MEAN 58.7 MAX 897 MIN 5.1 CFSM 1.80 IN 24.47
WTR YR 1978 TOTAL 20530.4 MEAN 56.2 MAX 480 MIN 4.1 CFSM 1.72 IN 23.43

01359802 HUDSON RIVER BELOW CASTLETON-ON-HUDSON, NY

LOCATION.--Lat 42°31'07", long 73°46'00", Albany-Rensselaer Counties, Hydrologic Unit 02020006, at navigation light 52, 0.5 mi (0.8 km) southwest of Castleton-on-Hudson, 0.6 mi (1.0 km) downstream from Vlochie Kill, and 1.7 mi (2.7 km) downstream from Vloman Kill.

PERIOD OF RECORD.--March to September 1978.
PESTICIDE DATA: 1978 (c).
ORGANIC DATA: PCB--1978 (c).
PCN--1978 (c).
NUTRIENT DATA: 1978 (c).

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	SOLIDS, VOLA-TILE, SUS-PENDED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)
MAR									
29...	1000	152	11	.61	1.1	1.7	.17	6000	22
APR									
18...	1100	17	7	.56	.16	.72	.04	510	14
MAY									
04...	1030	14	6	.55	.46	1.0	.03	520	10
JUN									
21...	1100	23	14	.70	.77	1.5	.07	820	26
JUL									
18...	1330	16	2	.53	.90	1.4	.10	1000	27
AUG									
07...	1400	8	0	.60	.83	1.4	.06	1100	9
SEP									
11...	1015	15	4	.94	.72	1.7	--	510	21

DATE	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	PCB, TOTAL (UG/L)	NAPH-THA-LENES, POLY-CHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR-DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DI-ELDRIN TOTAL (UG/L)
MAR									
29...	120	.1	.00	.00	.0	.00	.00	.00	.00
APR									
18...	20	.1	.00	.00	.0	.00	.00	.00	.00
MAY									
04...	40	.1	.00	.00	.0	.00	.00	.00	.00
JUN									
21...	60	.2	.00	.00	.0	.00	.00	.00	.00
JUL									
18...	70	.4	.00	.00	.0	.00	.00	.00	.00
AUG									
07...	50	.2	.00	.00	.0	.00	.00	.00	.00
SEP									
11...	70	.5	.00	.00	.0	.00	.00	.00	.00

DATE	ENDO-SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	HEPTA-CHLOR, TOTAL (UG/L)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	MIREX, TOTAL (UG/L)	TOX-APHENE, TOTAL (UG/L)	SEDI-MENT, SUS-PENDED (MG/L)
MAR								
29...	--	.00	.00	.00	.00	.00	0	149
APR								
18...	--	.00	.00	.00	.00	.00	0	10
MAY								
04...	--	.00	.00	.00	.00	.00	0	6
JUN								
21...	.00	.00	.00	.00	.00	.00	0	16
JUL								
18...	.00	.00	.00	.00	.00	.00	0	26
AUG								
07...	.00	.00	.00	.00	.00	.00	0	9
SEP								
11...	.00	.00	.00	.00	.00	.00	0	17

01361450 HUDSON RIVER AT CATSKILL, NY

LOCATION.--Lat 42°12'36", long 73°51'12", Greene-Columbia Counties, Hydrologic Unit 02020006, at Greene County Highway Department Dock in Catskill, 600 ft (183 m) upstream from Catskill Creek, and 0.9 mi (1.4 km) downstream from Rip Van Winkle Bridge.

DRAINAGE AREA.--9,336 mi² (24,180 km²).

PERIOD OF RECORD.--Water years 1969-75, and current year.
CHEMICAL DATA: 1969 (c), 1970-74 (d), 1975 (c).
MINOR ELEMENTS DATA: 1972-74 (b).
PESTICIDE DATA: 1978 (c).
ORGANIC DATA: TOC--1974 (b), 1975 (c).
PCB--1978 (c).
PCN--1978 (c).
NUTRIENT DATA: 1969 (c), 1970-74 (d), 1975 (c), 1978 (c).

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)	SOLIDS, VOLATILE, SUSPENDED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)
MAR									
29...	1300	146	6	.64	.93	1.6	.11	5300	47
APR									
18...	1500	39	6	.51	.39	.90	.05	1600	11
MAY									
04...	1300	12	3	.54	.49	1.0	.03	560	6
JUN									
21...	1530	25	17	.81	.66	1.5	.06	690	26
JUL									
18...	1015	10	4	.75	.65	1.4	.06	610	17
AUG									
08...	1515	13	7	.61	.61	1.2	.06	320	31
SEP									
11...	1430	52	9	.63	.55	1.2	--	460	23

DATE	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	PCB, TOTAL (UG/L)	NAPHTHALENES, POLYCHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLORDANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DIELDRIN TOTAL (UG/L)
MAR									
29...	130	.2	.00	.00	.0	.00	.00	.00	.00
APR									
18...	50	.0	.00	.00	.0	.00	.00	.00	.00
MAY									
04...	40	.2	.00	.00	.0	.00	.00	.00	.00
JUN									
21...	60	.1	.00	.00	.0	.00	.00	.00	.00
JUL									
18...	40	.2	.00	.00	.0	.00	.00	.00	.00
AUG									
08...	60	.1	.00	.00	.0	.00	.00	.00	.00
SEP									
11...	50	.1	.00	.00	.0	.00	.00	.00	.00

DATE	ENDOSULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	HEPTACHLOR, TOTAL (UG/L)	HEPTACHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	MIREX, TOTAL (UG/L)	TOXAPHENE, TOTAL (UG/L)	SEDIMENT, SUSPENDED (MG/L)
MAR								
29...	--	.00	.00	.00	.00	.00	0	140
APR								
18...	--	.00	.00	.00	.00	.00	0	29
MAY								
04...	--	.00	.00	.00	.00	.00	0	--
JUN								
21...	.00	.00	.00	.00	.00	.00	0	41
JUL								
18...	.00	.00	.00	.00	.00	.00	0	--
AUG								
08...	.00	.00	.00	.00	.00	.00	0	14
SEP								
11...	.00	.00	.00	.00	.00	.00	0	15

01361570 TENMILE CREEK AT OAK HILL, NY

LOCATION.--Lat 42°24'26", long 74°08'06", Greene County, Hydrologic Unit 02020006, on left bank 425 ft (130 m) upstream from bridge on State Highway 81, about 1,500 ft (457 m) upstream from mouth, 0.9 mi (1.4 km) east of Oak Hill, and 2.3 mi (3.7 km) downstream from Eightmile Creek.

DRAINAGE AREA.--35.3 mi^2 (91.4 km^2).

PERIOD OF RECORD.--October 1968 to September 1978 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 588.19 ft (179.280 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are poor.

AVERAGE DISCHARGE.--10 years, 57.3 ft^3/s (1.623 m^3/s), 22.04 in/yr (560 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,400 ft^3/s (153 m^3/s) Nov. 8, 1977, gage height, 7.98 ft (2.432 m), from rating curve extended above 700 ft^3/s (19.8 m^3/s); minimum daily, 0.5 ft^3/s (0.014 m^3/s) Oct. 1-4, 1968; minimum gage height, 1.98 ft (0.604 m) Sept. 9-11, 1978.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 650 ft^3/s (18 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 17	1600	1,840	52.1	5.94	1.811	Jan. 26	1030	662	18.7	4.68	1.426
Nov. 8	1400	*5,400	153	*7.98	2.432	Mar. 27	1800	716	20.3	4.76	1.451
Nov. 11	0430	709	20.1	4.75	1.448	Apr. 1	2200	960	27.2	5.07	1.545
Jan. 9	1000	4,220	120	7.41	2.259	May 17	0100	668	18.9	4.68	1.426

Minimum discharge, 0.68 ft^3/s (0.019 m^3/s) Sept. 9-11, gage height, 1.98 ft (0.604 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	56	28	395	40	80	5.0	398	26	54	8.8	6.3	3.6
2	151	26	340	45	74	5.0	494	25	38	8.6	5.2	2.6
3	94	25	186	35	70	5.0	209	23	36	7.9	4.2	2.1
4	75	24	114	25	64	5.0	143	22	36	23	5.1	2.0
5	56	32	71	20	60	5.0	224	23	29	23	4.8	1.6
6	46	36	69	15	58	5.0	198	27	25	14	8.5	1.5
7	40	54	57	10	58	5.0	228	22	22	9.9	10	1.4
8	34	1670	59	8.0	56	5.2	206	21	41	8.1	14	1.1
9	38	951	38	1400	52	5.4	123	21	41	7.4	11	.82
10	45	280	36	395	50	5.8	100	20	42	6.8	8.6	.68
11	37	449	35	170	48	6.0	125	20	28	6.4	7.5	.87
12	33	223	33	130	46	6.2	287	20	22	6.2	6.6	1.1
13	29	132	45	100	44	8.0	236	19	22	6.0	6.1	1.4
14	28	75	100	70	42	19	197	20	23	6.2	5.3	1.1
15	52	61	299	50	38	101	122	221	19	6.1	4.9	.94
16	52	56	182	45	33	120	91	331	17	5.4	4.5	1.3
17	1060	51	96	40	28	22	80	445	16	6.0	4.0	1.4
18	454	59	61	35	26	18	70	264	15	5.5	3.8	1.3
19	186	45	45	35	25	16	73	182	29	4.9	3.5	5.9
20	206	36	36	35	24	24	158	117	36	4.5	3.1	3.5
21	138	32	44	35	23	66	147	86	35	4.3	2.9	2.8
22	98	28	79	50	22	224	102	62	23	4.4	2.7	2.5
23	75	25	61	80	21	252	78	49	18	4.2	2.4	2.3
24	61	23	51	170	17	222	66	45	16	4.1	2.6	2.1
25	54	21	59	209	9.0	122	58	54	13	4.0	3.2	2.0
26	48	32	80	370	6.0	83	51	44	13	3.8	3.1	1.8
27	42	32	60	250	5.0	412	46	37	13	3.7	2.7	1.8
28	38	26	50	200	5.0	473	42	33	11	4.1	2.4	1.8
29	34	23	40	120	---	367	33	32	10	3.9	2.5	1.8
30	30	23	35	100	---	277	29	28	9.4	4.0	2.1	1.8
31	28	---	40	90	---	226	---	35	---	3.9	3.4	---
TOTAL	3418	4578	2896	4377.0	1084.0	3115.6	4414	2374	752.4	219.1	157.0	56.91
MEAN	110	153	93.4	141	38.7	101	147	76.6	25.1	7.07	5.06	1.90
MAX	1060	1670	395	1400	80	473	494	445	54	23	14	5.9
MIN	28	21	33	8.0	5.0	5.0	29	19	9.4	3.7	2.1	.68
CFSM	3.12	4.33	2.65	3.99	1.10	2.86	4.16	2.17	.71	.20	.14	.05
IN.	3.60	4.82	3.05	4.61	1.14	3.28	4.65	2.50	.79	.23	.17	.06

CAL YR 1977 TOTAL 27868.84 MEAN 76.4 MAX 1670 MIN .68 CFSM 2.16 IN 29.37
WTR YR 1978 TOTAL 27442.01 MEAN 75.2 MAX 1670 MIN .68 CFSM 2.13 IN 28.92

01362198 ESOPUS CREEK AT SHANDAKEN, NY
(Hydrologic bench-mark station)

LOCATION.--Lat 42°06'59", long 74°23'20", Ulster County, Hydrologic Unit 02020006, on left bank 2,400 ft (732 m) downstream from bridge on State Highway 28, at Shandaken, 0.5 mi (0.8 km) downstream from Bushnellsville Creek, 0.5 mi (0.8 km) upstream from Fox Hollow Creek, and 5.2 mi (8.4 km) northwest of Phoenicia. Water-quality sampling site at discharge station.

DRAINAGE AREA.--59.5 mi^2 (154.1 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1963 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,017.27 ft (310.064 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records poor. Occasional slight regulation when filling or draining swimming pools or small ponds above station.

AVERAGE DISCHARGE.--15 years, 142 ft^3/s (4.021 m^3/s), 32.41 in/yr (823 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,870 ft^3/s (223 m^3/s) July 28, 1969, gage height, 10.88 ft (3.316 m), from rating curve extended above 2,200 ft^3/s (62.3 m^3/s) on basis of slope-area measurement of peak flow; minimum, 2.8 ft^3/s (0.079 m^3/s) Nov. 22, 23, 1964, result of freezeup, gage height, 4.15 ft (1.265 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,100 ft^3/s (31 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 1	2145	1,120	31.7	7.15	2.179	Jan. 9	0830	*5,350	152	9.87	3.008
Oct. 17	1100	2,600	73.6	8.72	2.658	Jan. 26	1145	1,510	42.8	7.25	2.210
Nov. 9	1900	4,860	138	*10.38	3.164	May 15	0430	2,690	76.2	8.15	2.484

Minimum discharge, 11 ft^3/s (0.21 m^3/s) Sept. 13-18, gage height, 4.82 ft (1.436 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	325	113	236	140	204	50	554	176	137	49	20	34
2	607	106	297	140	186	50	801	159	116	45	19	25
3	391	101	308	130	170	50	640	140	119	43	18	20
4	299	98	286	120	150	50	497	131	116	166	20	18
5	236	111	260	110	140	50	561	137	105	119	20	15
6	205	97	243	110	130	50	518	137	100	97	43	14
7	175	120	210	110	120	48	547	131	97	85	47	13
8	151	1610	183	130	110	47	569	128	190	78	78	12
9	355	1360	174	2630	100	45	476	193	173	70	47	13
10	397	795	161	1230	90	45	412	238	156	67	41	12
11	312	726	150	648	86	45	443	208	143	61	38	12
12	262	537	140	431	82	45	713	193	131	55	36	12
13	220	425	150	330	78	47	809	183	131	49	34	11
14	200	345	210	284	74	90	784	246	119	45	33	11
15	241	290	463	230	70	163	547	1790	108	45	29	11
16	248	253	415	197	66	134	406	1420	97	43	28	11
17	1840	238	350	170	64	131	325	1340	92	45	28	11
18	1130	232	293	140	60	125	274	996	88	47	26	12
19	732	203	259	140	58	122	265	760	90	40	26	59
20	595	185	227	130	56	122	358	576	78	36	25	34
21	452	175	222	120	56	180	382	483	85	34	23	28
22	370	166	203	110	56	325	320	370	105	31	20	25
23	303	156	181	108	56	347	284	304	83	29	19	23
24	255	150	168	130	54	358	260	274	76	28	19	20
25	225	142	250	137	52	314	246	255	72	26	26	18
26	201	154	240	922	52	284	238	222	70	23	20	18
27	185	137	230	721	52	698	230	200	65	23	19	18
28	156	127	210	456	50	776	222	183	61	26	19	18
29	144	118	180	341	---	665	215	170	51	23	19	15
30	131	117	160	279	---	539	197	153	53	20	18	15
31	119	---	150	234	---	463	---	146	---	19	38	---
TOTAL	11462	9407	7209	11108	2522	6458	13093	12042	3107	1567	896	558
MEAN	370	314	233	358	90.1	209	436	388	104	50.5	28.9	18.6
MAX	1840	1610	463	2630	204	776	809	1790	190	166	78	59
MIN	119	97	140	108	50	45	197	128	51	19	18	11
CFSM	6.22	5.28	3.92	6.02	1.51	3.50	7.33	6.52	1.75	.85	.49	.31
IN.	7.17	5.88	4.51	6.94	1.58	4.04	8.19	7.53	1.94	.98	.56	.35

CAL YR 1977 TOTAL 69998.5 MEAN 192 MAX 2600 MIN 7.3 CFSM 3.23 IN 43.76
WTR YR 1978 TOTAL 79429.0 MEAN 218 MAX 2630 MIN 11 CFSM 3.66 IN 49.66

01362198 ESOPUS CREEK AT SHANDAKEN, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1963 to current year.
CHEMICAL DATA: 1963-65 (a), 1966-67 (b), 1968-78 (d).
MINOR ELEMENTS DATA: 1964-65 (a), 1967-73 (a), 1975-76 (a), 1977 (b), 1978 (a).
RADIOLOGICAL DATA: 1967-77 (a).
PESTICIDE DATA: 1967-72 (a), 1974-77 (a).
ORGANIC DATA: PCB--1974-77 (a).
PCN--1977 (a).
NUTRIENT DATA: 1968 (a), 1969-71 (d), 1972 (c), 1974 (a), 1975-78 (d).
BIOLOGICAL DATA:
Coliform bacteria--1968-69 (d), 1970-72 (c), 1973-78 (d).
SEDIMENT DATA: 1969-71 (c), 1972-75 (d), 1977-78 (d).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: July 1963 to July 1968, January 1970 to current year.

INSTRUMENTATION.--Temperature recorder since July 1963.

REMARKS.--No temperature record Nov. 18 to Dec. 7, Feb. 11 to Mar. 21, Aug. 9-23, due to instrument malfunctions.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum (water years 1964-68, 1970-76, 1978), 28.5°C Aug. 16, 1965; minimum, freezing point on many days during winter periods except water years 1967 and 1976.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum recorded, 26.5°C July 23; minimum recorded, freezing point on many days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
OCT , 1977									
13...	1100	221	41	6.3	12.1	101	46	K8	29
NOV									
14...	1400	343	41	6.4	14.0	112	K160	K11	16
DEC									
08...	1400	180	44	6.7	14.3	102	K100	K4	K1
FEB , 1978									
02...	1100	180	50	6.0	15.0	103	K5	K1	<1
09...	1500	E80	48	5.6	15.0	103	K10	K3	K1
MAR									
21...	1000	125	64	6.2	14.0	111	350	K14	K2
APR									
26...	1200	238	38	5.8	13.0	103	K10	<150	K1
MAY									
05...	0900	134	44	5.6	13.2	100	200	42	20
JUN									
14...	1200	119	40	6.2	11.2	108	K16	K14	26
JUL									
19...	1500	38	52	6.1	9.0	106	410	18	46
AUG									
01...	1000	23	62	6.0	9.7	105	K260	44	51
SEP									
13...	1230	11	70	7.2	10.3	108	K170	K5	K2

E Estimated.

K Results based on colony count outside the acceptable range (non-ideal colony count).

01362198 ESOPUS CREEK AT SHANDAKEN, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)
OCT , 1977									
13...	16	7	4.5	1.1	1.6	.5	11	0	9
NOV									
14...	14	1	3.9	1.0	1.4	.5	16	0	13
DEC									
08...	14	5	4.1	1.0	1.6	.4	11	0	9
FEB , 1978									
02...	14	6	4.0	.9	2.0	.3	9	0	7
09...	15	4	4.5	1.0	2.0	.4	13	0	11
MAR									
21...	17	6	4.7	1.2	3.3	.5	13	0	11
APR									
26...	13	2	3.9	.8	1.3	.4	14	0	11
MAY									
05...	14	0	4.2	.9	2.1	.5	20	0	16
JUN									
14...	15	7	4.3	1.0	1.8	.6	--	--	8
JUL									
19...	19	3	5.6	1.2	2.4	.6	--	--	16
AUG									
01...	22	5	6.6	1.4	3.0	.5	--	--	17
SEP									
13...	20	4	--	--	--	--	--	--	16

DATE	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)
OCT , 1977								
13...	7.9	1.6	.0	2.9	30	26	.23	.01
NOV								
14...	6.5	1.1	.0	3.1	29	25	.22	.02
DEC								
08...	7.2	1.7	.0	1.9	--	23	.23	.00
FEB , 1978								
02...	1.2	3.8	.0	2.6	--	19	.26	.00
09...	7.4	2.2	.0	2.8	29	27	.25	.00
MAR								
21...	9.1	5.4	.0	3.2	36	34	.31	.01
APR								
26...	6.2	1.5	.0	2.3	26	23	.34	.00
MAY								
05...	6.8	2.6	.0	2.2	30	29	.30	.00
JUN								
14...	6.6	2.5	.0	1.7	32	23	.13	.00
JUL								
19...	7.0	2.4	.0	3.0	36	32	.09	.00
AUG								
01...	9.2	4.7	.0	3.2	36	39	.20	.01
SEP								
13...	--	--	--	--	--	--	.09	.00

DATE	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	SELENIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)
JUL , 1978												
19...	0	0	0	10	1	30	0	10	.5	0	0	0

01362198 ESOPUS CREEK AT SHANDAKEN, NY--Continued

SUSPENDED-SEDIMENT MEASUREMENTS, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
OCT				
13...	1100	221	3	1.8
NOV				
14...	1400	343	6	5.6
DEC				
08...	1400	180	7	3.4
FEB				
02...	1100	180	2	.97
09...	1500	E80	3	.65
MAR				
21...	1000	125	5	1.7
APR				
26...	1200	238	3	1.9
MAY				
05...	0900	134	3	1.1
JUN				
14...	1200	119	2	.64
JUL				
19...	1500	38	2	.21
AUG				
01...	1000	23	6	.37
SEP				
13...	1230	11	4	.12

E Estimated.

01362198 ESOPUS CREEK AT SHANDAKEN, NY--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	12.5	12.0	8.0	7.5	---	---	1.5	.5	.0	.0	---	---
2	12.5	11.5	10.0	7.5	---	---	.5	.5	.5	.0	---	---
3	11.5	11.0	10.5	8.5	---	---	1.0	.5	.5	.0	---	---
4	11.5	10.0	12.5	10.5	---	---	1.0	1.0	1.0	.5	---	---
5	12.5	10.0	12.0	11.5	---	---	1.5	1.0	1.5	1.0	---	---
6	12.0	10.5	11.5	11.0	---	---	2.0	1.5	1.0	1.0	---	---
7	10.5	9.5	11.5	10.0	---	---	2.0	2.0	1.0	.5	---	---
8	9.5	8.5	10.0	10.0	2.0	1.0	2.0	2.0	.5	.0	---	---
9	11.0	9.5	10.0	10.0	2.0	1.0	2.5	1.5	.5	.0	---	---
10	10.0	9.0	10.5	10.0	1.0	1.0	1.5	1.5	.5	.0	---	---
11	10.5	8.0	10.5	8.5	2.0	1.0	1.5	1.5	---	---	---	---
12	10.5	9.0	8.5	8.5	2.0	2.0	1.5	1.5	---	---	---	---
13	9.0	8.5	7.5	7.0	2.0	1.0	1.0	1.0	---	---	---	---
14	8.5	8.0	6.0	6.0	2.0	1.0	1.0	.5	---	---	---	---
15	8.5	8.0	6.0	6.0	3.0	2.0	.5	.5	---	---	---	---
16	9.5	8.0	7.0	6.0	4.0	3.0	.5	.5	---	---	---	---
17	9.0	8.0	7.5	6.5	4.0	3.0	.0	.0	---	---	---	---
18	8.5	8.0	---	---	3.0	3.0	.0	.0	---	---	---	---
19	8.0	8.0	---	---	3.5	3.0	.0	.0	---	---	---	---
20	8.5	8.0	---	---	3.5	3.0	.0	.0	---	---	---	---
21	9.0	8.0	---	---	3.0	2.0	.0	.0	---	---	---	---
22	9.0	8.0	---	---	3.0	2.5	.5	.0	---	---	4.0	3.0
23	8.5	7.5	---	---	3.0	2.0	.5	.5	---	---	6.5	3.0
24	8.0	7.5	---	---	3.0	2.0	1.0	.5	---	---	5.5	2.5
25	9.0	7.5	---	---	3.0	2.5	1.0	1.0	---	---	4.5	2.5
26	9.5	8.0	---	---	2.5	1.0	1.0	1.0	---	---	2.5	2.0
27	11.5	9.5	---	---	1.0	.5	1.0	.5	---	---	3.0	2.0
28	10.0	9.0	---	---	1.5	1.0	.5	.5	---	---	4.5	3.0
29	9.0	7.5	---	---	1.5	1.5	.5	.5	---	---	5.0	3.0
30	8.0	7.5	---	---	1.5	1.0	.5	.5	---	---	5.5	3.0
31	7.5	7.5	---	---	1.5	1.0	.0	.0	---	---	5.5	3.0
MONTH	12.5	7.5	12.5	6.0	4.0	.5	2.5	.0	1.5	.0	6.5	2.0

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	6.0	3.5	6.0	2.0	19.5	12.5	21.5	13.5	21.0	14.5	21.0	15.5
2	5.0	3.0	11.5	2.5	19.5	12.5	21.5	13.0	22.0	16.0	22.5	13.0
3	3.5	2.0	12.0	3.5	15.5	12.5	16.0	13.5	25.0	16.5	21.5	14.0
4	5.0	3.0	11.5	3.0	17.0	10.5	13.5	12.0	21.5	17.0	21.5	15.5
5	4.5	3.5	6.0	3.5	15.5	10.0	19.5	11.0	17.0	14.5	21.0	10.5
6	6.0	3.5	7.5	4.0	19.5	10.0	21.0	12.5	16.5	15.5	23.5	10.0
7	6.5	5.0	10.0	5.5	14.0	11.0	22.0	13.0	18.0	16.0	24.0	15.5
8	5.5	4.0	13.5	4.5	14.5	12.0	21.0	14.0	21.5	15.5	20.0	12.5
9	7.0	4.0	13.0	7.5	13.5	12.5	22.5	15.5	---	---	20.5	14.0
10	7.5	3.5	8.5	7.0	19.5	11.0	21.5	15.0	---	---	18.0	11.0
11	7.0	5.0	16.0	7.0	20.5	10.5	19.0	13.5	---	---	16.5	14.5
12	8.0	5.5	11.5	7.0	20.0	12.5	21.5	12.0	---	---	19.0	15.5
13	8.0	5.5	9.0	7.5	16.0	12.0	22.5	12.5	---	---	19.5	10.5
14	6.0	5.0	9.5	8.5	16.5	11.0	19.5	15.5	---	---	18.0	10.0
15	6.0	4.5	8.5	7.0	18.0	10.0	21.5	15.5	---	---	16.5	13.5
16	7.0	4.5	7.0	6.5	18.5	10.5	20.0	16.0	---	---	17.5	13.0
17	6.0	5.0	7.0	6.5	14.5	12.0	18.5	16.0	---	---	17.5	11.0
18	9.0	4.0	8.0	7.0	18.0	12.0	23.5	14.5	---	---	16.0	10.0
19	6.0	5.0	12.0	7.0	19.5	14.0	23.5	15.0	---	---	16.0	10.0
20	5.5	5.0	13.0	8.5	21.5	13.0	24.0	16.0	---	---	19.5	14.0
21	4.0	3.0	12.0	8.5	17.0	12.5	23.5	17.0	---	---	21.0	15.0
22	9.0	3.0	15.5	7.0	19.0	13.5	25.0	18.0	---	---	20.0	15.5
23	9.0	2.0	14.0	8.0	19.5	12.0	26.5	18.5	---	---	18.5	10.5
24	10.0	2.5	10.0	9.0	20.5	12.0	26.0	18.5	21.0	17.0	18.0	11.5
25	9.0	3.0	15.5	9.0	20.5	12.5	22.5	16.0	18.5	15.5	17.5	10.0
26	11.0	3.0	18.0	9.5	16.5	13.0	22.5	16.0	22.5	15.0	15.5	9.5
27	10.0	4.0	19.5	10.0	23.0	15.0	23.5	17.5	22.5	14.5	15.5	6.0
28	11.0	4.0	20.5	10.5	24.0	16.5	24.5	18.0	18.5	17.0	16.0	10.0
29	9.5	3.5	19.0	12.0	23.5	15.5	21.0	15.5	24.0	17.0	14.5	6.0
30	9.5	3.0	20.0	12.0	23.0	15.0	20.0	16.0	23.0	16.0	14.0	5.5
31	---	---	19.5	12.5	---	---	15.5	14.5	19.0	15.5	---	---
MONTH	11.0	2.0	20.5	2.0	24.0	10.0	26.5	11.0	25.0	14.5	24.0	5.5

01362500 ESOPUS CREEK AT COLDBROOK, NY

LOCATION.--Lat 42°00'51", long 74°16'16", Ulster County, Hydrologic Unit 02020006, on left bank at downstream side of bridge on Coldbrook Road, in Coldbrook, 0.3 mi (0.5 km) downstream from Little Beaver Kill, 1.5 mi (2.4 km) upstream from Ashokan Reservoir, and 2.5 mi (4.0 km) south of Mount Tremper.

DRAINAGE AREA.--192 mi^2 (497 km^2).

PERIOD OF RECORD.--January 1914 to current year. Monthly discharge only for some periods, published in WSP 1302.

GAGE.--Water-stage recorder. Datum of gage is 621.54 ft (189.445 m) National Geodetic Vertical Datum of 1929. Prior to June 15, 1916, nonrecording gage at same site and datum.

REMARKS.--Records fair except those for winter periods, which are poor. Since 1924, water diverted from Schoharie Reservoir through Shandaken Tunnel (see Reservoirs in Hudson River Basin) enters Esopus Creek 10.5 mi (16.9 km) above station and is included in records of daily discharge.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 59,600 ft^3/s (1,690 m^3/s) Mar. 30, 1951, gage height, 20.70 ft (6.309 m), from rating curve extended above 13,000 ft^3/s (368 m^3/s) on basis of slope-area measurements at gage heights 12.39 ft (3.776 m), 15.15 ft (4.618 m), and 20.70 ft (6.309 m); minimum daily, 8 ft^3/s (0.23 m^3/s) Oct. 14, 1914.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 30,000 ft^3/s (850 m^3/s) Nov. 8, gage height, 16.32 ft (4.974 m) from rating curve extended as explained above; minimum daily, 25 ft^3/s (0.71 m^3/s) Sept. 17; minimum gage height, 4.05 ft (1.234 m) Sept. 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2390	630	1080	290	560	470	1940	788	725	940	291	385
2	3070	636	1140	260	500	460	2620	967	1060	795	77	363
3	2340	623	975	240	450	460	1940	914	1070	479	260	358
4	1920	617	796	220	390	450	1540	862	993	1380	880	348
5	1650	636	682	210	340	450	1720	854	505	890	871	348
6	1520	617	611	200	300	450	1610	689	295	716	795	348
7	1400	751	643	190	280	450	1740	656	291	643	442	343
8	1320	10800	400	246	290	450	1740	592	1010	589	532	473
9	2410	9840	330	11400	290	450	1460	730	804	560	448	890
10	2410	2620	280	3390	300	450	1290	914	604	546	424	768
11	1990	2300	250	1860	300	450	1310	723	499	539	413	492
12	1770	1520	250	1300	300	450	1850	649	430	512	413	424
13	1590	1110	260	900	320	491	2110	623	467	499	407	338
14	1540	837	400	700	340	744	2090	780	401	486	396	269
15	1730	669	1400	600	520	1240	1520	5630	343	492	390	150
16	1670	563	1120	540	520	975	1170	4120	519	479	385	35
17	6790	534	923	490	496	862	975	4210	499	479	379	25
18	3370	546	758	450	455	796	837	3330	479	473	374	27
19	2110	445	669	420	420	788	879	2630	512	454	369	214
20	1690	394	574	400	400	780	1460	1860	454	442	363	109
21	1260	360	649	380	410	1000	1400	1520	499	430	358	72
22	1000	335	611	370	440	1640	1130	1190	667	419	353	58
23	812	309	496	370	470	1670	992	951	505	413	348	50
24	737	301	445	370	480	1610	897	951	519	407	348	44
25	796	272	723	420	480	1100	820	1060	492	401	369	39
26	730	580	600	3100	480	992	780	795	479	396	353	34
27	730	403	450	2390	480	3710	780	683	473	390	348	83
28	702	347	380	1520	470	3250	879	597	454	390	348	97
29	656	309	350	1110	---	2560	845	519	454	379	353	97
30	623	305	320	750	---	2020	788	454	691	374	343	167
31	605	---	320	660	---	1690	---	424	---	369	419	---
TOTAL	53331	40209	18885	35756	11481	33358	41112	41665	17193	16761	12849	7448
MEAN	1720	1340	609	1153	410	1076	1370	1344	573	541	414	248
MAX	6790	10800	1400	11400	560	3710	2620	5630	1070	1380	880	890
MIN	605	272	250	190	280	450	780	424	291	369	77	25

CAL YR 1977 TOTAL 297502 MEAN 815 MAX 10800 MIN 113
WTR YR 1978 TOTAL 330048 MEAN 904 MAX 11400 MIN 25

01364500 ESOPUS CREEK AT MOUNT MARION, NY

LOCATION.--Lat 42°02'16", long 73°58'21", Ulster County, Hydrologic Unit 02020006, on left bank at downstream side of bridge on Glasco Turnpike, 0.8 mi (1.3 km) east of Mount Marion, 1.6 mi (2.6 km) downstream from Plattekill Creek, and 4.5 mi (7.2 km) upstream from mouth.

DRAINAGE AREA.--419 mi² (1,085 km²).

PERIOD OF RECORD.--May 1907 to March 1918 (monthly discharge only, published in WSP 1302) occasional miscellaneous measurements, 1951, 1956, 1966, 1967, 1969. March 1970 to current year.

GAGE.--Water-stage recorder. Datum of gage is 40.16 ft (12.241 m) National Geodetic Vertical Datum of 1929. Prior to Aug. 12, 1970, nonrecording gage at same site (at different datum May 1907 to March 1908, and at present datum June 9, 1966 to Aug. 12, 1970).

REMARKS.--Records fair except those for winter periods, which are poor. Flow from 256 mi² (663 km²) of drainage area regulated by Ashokan Reservoir since Sept. 9, 1913. Water diverted from Schoharie Creek through Shandaken Tunnel (see Reservoirs in Hudson River Basin) since Feb. 3, 1924, enters Esopus Creek about 12.2 mi (31.6 km) above Ashokan Reservoir. Diversion from Plattekill Creek for water supply of Saugerties. Diversions upstream during summer months for irrigation purposes. Diversions for water supply of city of New York made from Ashokan Reservoir (see Reservoirs in Hudson River Basin). Discharge records for this station now represent the natural flow from 112 mi² (290 km²), together with spillage during high stages from the upstream reservoirs.

AVERAGE DISCHARGE.--8 years (1971-78), 632 ft³/s (17.90 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 28,000 ft³/s (793 m³/s) Apr. 26, 1910, gage height, 25.10 ft (7.650 m), datum then in use; minimum, 10 ft³/s (0.28 m³/s) Aug. 20-22, 1970, gage height, 11.77 ft (3.587 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 13,000 ft³/s (368 m³/s) Nov. 9, gage height, 22.32 ft (6.803 m); minimum, 28 ft³/s (0.80 m³/s) Sept. 13, 16, 17, 18, gage height, 12.13 ft (3.697 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	430	159	1280	470	1200	110	3080	239	406	86	49	99
2	2630	152	1670	400	1000	110	3170	234	296	80	50	83
3	1330	146	1870	360	800	100	3170	224	259	73	49	65
4	763	141	1880	320	640	100	2770	202	430	254	46	54
5	500	141	1580	310	500	100	2380	193	499	296	49	47
6	377	141	1480	290	400	100	2240	204	402	189	82	43
7	311	169	1290	284	350	100	2180	218	299	139	180	38
8	263	4510	969	284	300	100	2140	206	580	118	319	34
9	548	10900	723	6940	270	100	2010	345	767	104	172	33
10	913	10500	714	10600	250	100	1780	560	842	94	116	31
11	632	5890	520	6450	220	100	1580	555	610	101	89	31
12	470	3870	400	3490	200	110	1550	485	438	82	126	31
13	366	2880	348	2410	190	130	1540	387	364	73	147	30
14	322	2290	421	1800	180	270	1800	333	345	73	115	30
15	450	1600	1340	1400	170	1240	1920	2110	282	71	91	29
16	800	1230	1600	1000	160	1220	1710	5630	220	81	76	29
17	1300	1060	1690	740	150	906	1400	7160	187	80	67	29
18	1200	988	1520	640	150	691	1230	6950	161	95	59	29
19	1100	896	1320	560	140	621	1140	5880	224	75	53	139
20	800	736	1080	500	130	697	1680	4260	187	66	49	122
21	580	565	1150	470	120	835	1690	3080	155	58	45	78
22	450	504	1700	450	110	1610	1500	2280	414	56	41	61
23	400	427	1300	420	100	1750	1370	1610	261	51	40	55
24	350	365	990	400	100	1800	1200	1200	198	50	39	51
25	290	343	1010	430	100	1380	1060	1940	163	48	48	45
26	270	766	1310	1590	100	1060	631	1650	143	44	51	41
27	240	989	1060	4030	100	4450	354	1210	139	43	45	39
28	220	737	860	4410	110	6090	293	861	127	48	43	36
29	200	563	680	3210	---	5690	259	610	111	50	50	34
30	183	444	580	2330	---	4620	239	438	97	45	49	33
31	169	---	520	1500	---	3620	---	336	---	43	62	---
TOTAL	18857	54102	34855	58488	8240	39910	49066	51590	9606	2766	2497	1499
MEAN	608	1803	1124	1887	294	1287	1636	1664	320	89.2	80.5	50.0
MAX	2630	10900	1880	10600	1200	6090	3170	7160	842	296	319	139
MIN	169	141	348	284	100	100	239	193	97	43	39	29

CAL YR 1977 TOTAL 255644 MEAN 700 MAX 10900 MIN 15
WTR YR 1978 TOTAL 331476 MEAN 908 MAX 10900 MIN 29

01365000 RONDOUT CREEK NEAR LOWES CORNERS, NY

LOCATION.--Lat 41°52'00", long 74°29'12", Sullivan County, Hydrologic Unit 02020007, on left bank 100 ft (30 m) downstream from small tributary, 350 ft (107 m) upstream from bridge on county road, 1.1 mi (1.8 km) upstream from Sugarloaf Brook, 1.1 mi (1.8 km) east of Lowes Corners, and 1.9 mi (3.1 km) southwest of Sundown.

DRAINAGE AREA.--38.5 mi² (99.7 km²).

PERIOD OF RECORD.--February 1937 to current year.

REVISED RECORDS.--WSP 1702: 1952.

GAGE.--Water-stage recorder. Datum of gage is 874.44 ft (266.529 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 4, 1938, nonrecording gage at highway bridge 350 ft (107 m) downstream at datum 847.00 ft (258.166 m) NGVD (levels by Board of Water Supply, City of New York). Oct. 4, 1938 to July 5, 1951, water-stage recorder at site 1.2 mi (1.9 km) downstream; Oct. 4, 1938 to July 3, 1949, datum 847.00 ft (258.166 m) NGVD and July 4, 1949 to July 5, 1951, datum 846.00 ft (257.861 m) NGVD (levels by Board of Water Supply, City of New York).

REMARKS.--Records good except those for winter periods, which are poor.

AVERAGE DISCHARGE.--41 years, 98.6 ft³/s (2.792 m³/s), 34.78 in/yr (883 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 7,600 ft³/s (215 m³/s) July 22, 1938, from rating curve extended above 2,600 ft³/s (73.6 m³/s); maximum gage height, 10.38 ft (3.164 m) Oct. 15, 1955; minimum discharge, 4.2 ft³/s (0.12 m³/s) Nov. 13, 15, 21, 23, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,200 ft³/s (34 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 1	2030	*3,540	100	*7.64	2.329
Nov. 8	1915	2,840	80.4	7.08	2.158
Jan. 9	0645	2,620	74.2	6.90	2.103
May 15	0445	1,500	42.5	5.78	1.762

Minimum discharge, 14 ft³/s (0.40 m³/s) Sept. 27, 28, 29, 30; minimum gage height, 2.89 ft (0.881 m) November 6, 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	654	56	236	107	150	37	354	140	117	32	22	22
2	664	49	218	103	140	35	426	133	101	30	20	18
3	300	46	192	90	130	34	312	129	108	30	19	17
4	208	52	172	84	130	33	259	123	112	104	20	17
5	160	45	159	85	120	33	333	151	90	56	19	16
6	141	41	151	82	120	32	303	151	80	38	43	16
7	119	66	132	80	110	32	353	141	86	33	45	16
8	103	869	116	96	100	32	351	139	151	31	48	16
9	430	481	112	1090	100	33	287	363	143	30	26	16
10	304	287	98	487	96	33	266	305	113	30	23	16
11	221	271	85	314	94	33	294	253	99	33	21	16
12	182	215	84	246	89	35	350	228	91	28	22	16
13	154	192	89	207	82	39	381	214	116	27	21	16
14	143	169	183	170	79	95	353	315	96	26	21	15
15	160	154	301	150	70	124	273	863	84	27	20	15
16	151	142	223	130	68	86	227	606	77	27	19	15
17	625	144	191	120	69	75	194	616	73	32	19	15
18	372	144	172	110	65	71	180	638	71	31	19	15
19	310	122	157	100	60	74	192	507	72	25	18	28
20	315	110	142	96	56	77	293	383	63	24	18	18
21	237	107	152	90	54	111	250	320	63	23	17	16
22	200	105	140	82	52	167	211	264	65	22	17	16
23	167	97	124	80	50	179	193	228	54	22	17	16
24	145	97	116	80	50	189	180	262	49	23	16	15
25	130	92	210	139	49	164	178	295	45	21	19	15
26	117	150	181	585	44	154	176	233	45	20	17	15
27	106	117	140	335	42	489	168	203	44	20	16	14
28	93	107	130	251	39	461	161	178	39	22	19	14
29	79	100	120	210	---	396	153	157	36	20	20	14
30	67	100	120	180	---	335	147	140	34	20	17	14
31	62	---	115	160	---	300	---	127	---	20	31	---
TOTAL	7119	4727	4761	6139	2308	3988	7803	8805	2417	927	689	488
MEAN	230	158	154	198	82.4	129	260	284	80.6	29.9	22.2	16.3
MAX	664	869	301	1090	150	489	426	863	151	104	48	28
MIN	62	41	84	80	39	32	147	123	34	20	16	14
CFSM	5.97	4.10	4.00	5.14	2.14	3.35	6.75	7.38	2.09	.78	.58	.42
IN.	6.88	4.57	4.60	5.93	2.23	3.85	7.54	8.51	2.34	.90	.67	.47

CAL YR 1977 TOTAL 44959 MEAN 123 MAX 2120 MIN 11 CFSM 3.20 IN 43.44
WTR YR 1978 TOTAL 50171 MEAN 137 MAX 1090 MIN 14 CFSM 3.56 IN 48.48

01365500 CHESTNUT CREEK AT GRAHAMSVILLE, NY

LOCATION.--Lat 41°50'42", long 74°32'27", Sullivan County, Hydrologic Unit 02020007, on right bank just downstream from bridge in Grahamsville, 600 ft (183 m) downstream from Red Brook, and 0.6 mi (1.0 km) upstream from bridge on State Highway 55.

DRAINAGE AREA.--20.9 mi² (54.1 km²).

PERIOD OF RECORD.--October 1938 to current year. Monthly discharge only for some periods, published in WSP 1302.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 880.96 ft (268.516 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except those for the winter periods, which are poor. Slight seasonal regulation caused by Beaverdam Pond on Red Brook.

AVERAGE DISCHARGE.--40 years, 39.4 ft³/s (1.116 m³/s), 25.60 in/yr (650 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,640 ft³/s (131 m³/s) Oct. 15, 1955, gage height, 5.02 ft (1.530 m), from rating curve extended above 1,300 ft³/s (36.8 m³/s) on basis of slope-area measurement at gage height 4.68 ft (1.426 m); minimum, 1.4 ft³/s (0.040 m³/s) Nov. 1, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 500 ft³/s (14 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 1	2000	1,450	41.1	2.91	0.887	Jan. 9	0700	*1,600	45.3	*3.02	0.920
Nov. 8	1600	1,050	29.7	2.61	0.796						

Minimum discharge, 4.8 ft³/s (0.14 m³/s) Sept. 9, 10, 14, 15, gage height, 0.51 ft (0.155 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	305	33	180	43	53	20	174	27	37	11	12	14
2	231	32	119	41	48	20	174	26	31	11	9.7	9.1
3	113	32	92	39	48	20	121	28	39	11	8.6	7.6
4	73	35	78	37	49	19	99	28	41	53	9.1	6.7
5	55	32	67	35	48	19	139	44	36	26	9.1	6.3
6	51	31	65	35	45	19	115	46	28	17	32	5.9
7	42	36	57	34	44	20	139	39	34	14	28	5.9
8	38	372	46	44	42	21	124	36	60	12	28	5.5
9	173	183	47	608	40	23	99	135	64	12	14	5.1
10	105	116	50	224	39	19	91	94	43	14	13	5.1
11	80	146	47	140	38	19	96	66	32	15	11	7.6
12	65	105	45	90	37	19	102	55	28	13	9.7	6.3
13	55	80	43	70	36	21	94	53	39	11	9.1	5.5
14	59	69	100	60	35	23	80	88	31	10	9.7	4.8
15	99	63	169	56	34	78	68	142	28	11	9.7	5.5
16	73	57	116	52	32	62	60	170	24	11	8.6	7.2
17	218	63	89	49	30	44	53	188	22	12	8.1	5.9
18	125	63	78	47	29	40	48	250	22	10	7.6	7.6
19	122	53	69	45	27	37	57	163	26	9.1	7.2	43
20	122	49	63	44	26	43	88	111	20	9.1	7.2	16
21	89	47	82	42	25	76	68	94	22	9.7	6.3	11
22	78	49	80	37	25	118	60	71	21	8.6	6.3	11
23	65	46	67	36	24	138	46	57	17	9.1	6.7	9.1
24	59	44	59	34	24	128	43	118	16	11	5.9	7.2
25	51	42	116	75	23	96	39	96	15	10	6.3	6.3
26	47	99	89	303	22	80	36	68	16	9.1	6.3	6.3
27	46	67	84	185	22	316	37	57	62	8.6	5.5	5.9
28	42	57	76	124	21	272	36	51	15	11	7.6	5.5
29	39	49	66	96	---	215	31	44	13	8.1	7.6	5.5
30	36	51	52	78	---	167	28	43	12	9.1	5.9	5.5
31	35	---	47	66	---	146	---	41	---	8.6	22	---
TOTAL	2791	2201	2438	2869	966	2338	2445	2529	894	395.1	337.8	253.9
MEAN	90.0	73.4	78.6	92.5	34.5	75.4	81.5	81.6	29.8	12.7	10.9	8.46
MAX	305	372	180	608	53	316	174	250	64	53	32	43
MIN	35	31	43	34	21	19	28	26	12	8.1	5.5	4.8
CFSM	4.31	3.51	3.76	4.43	1.65	3.61	3.90	3.90	1.43	.61	.52	.41
IN.	4.97	3.92	4.34	5.11	1.72	4.16	4.35	4.50	1.59	.70	.60	.45

CAL YR 1977 TOTAL 18816.4 MEAN 51.6 MAX 680 MIN 3.0 CFSM 2.47 IN 33.49
WTR YR 1978 TOTAL 20457.8 MEAN 56.0 MAX 608 MIN 4.8 CFSM 2.68 IN 36.41

Note.--No gage-height record Feb. 3 to Mar. 18.

01367500 RONDOUT CREEK AT ROSENDALE, NY

LOCATION.--Lat 41°50'35", long 74°05'11", Ulster County, Hydrologic Unit 02020007, on left bank 30 ft (9 m) upstream from bridge on James Street in Rosendale, and 3 mi (5 km) upstream from Wallkill River.

DRAINAGE AREA.--386 mi^2 (1,000 km^2) (see REMARKS below).

PERIOD OF RECORD.--July 1901 to November 1903, October 1905 to January 1919, August 1926, to current year. Monthly discharge only for some periods, published in WSP 1302, and WRD NY 1970.

REVISED RECORDS.--WSP 641: Drainage Area. WSP 756: 1933.

GAGE.--Water-stage recorder. Datum of gage is 32.83 ft (10.007 m) National Geodetic Vertical Datum of 1929. Prior to January 1919, nonrecording gage at site 150 ft (46 m) downstream at datum 38.83 ft (11.835 m) NGVD. Aug. 3, 1926 to Sept. 10, 1969, at present site at datum 42.83 ft (13.055 m) NGVD. Sept. 11, 1969 to Feb. 3, 1970, water-stage recorder, and June 9, 1970 to Jan. 18, 1971, nonrecording gage at site 0.2 mi (0.3 km) upstream at datum 44.03 ft (13.420 m) NGVD.

REMARKS.--Records fair except those for winter periods, which are poor. Occasional regulation from hydroelectric plant upstream from station. Diversion from Rondout Creek through the emergency connection to the Delaware Aqueduct at Lackawack for New York City water supply during period April 1944 to May 1951. Since October 1950, flow regulated by Rondout Reservoir (see Reservoirs in Hudson River Basin). Subsequent to May 1951, entire flow except for period of spilling, diverted from Rondout Reservoir for New York City water supply. Discharge records for this station now represent the natural flow from 272 mi^2 (704 km^2), together with spillage during high flow from Rondout Reservoir.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 35,800 ft^3/s (1,010 m^3/s) Oct. 16, 1955, gage height, 36.8 ft (11.22 m), datum then in use, from floodmarks, from rating curve extended above 15,000 ft^3/s (425 m^3/s) on basis of contracted-opening measurement at gage height 33.93 ft (10.342 m); minimum, 2.2 ft^3/s (0.062 m^3/s) July 16, 1965; minimum daily, 3.0 ft^3/s (0.085 m^3/s) July 16, 1965.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 20,800 ft^3/s (589 m^3/s) Nov. 9, gage height, 21.32 ft (6.498 m); minimum, 53 ft^3/s (1.50 m^3/s) Aug. 24, gage height, 8.95 ft (2.728 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	414	285	2410	698	900	260	2470	333	669	112	87	214
2	3000	285	2230	580	800	260	2860	329	469	107	114	130
3	1270	281	1520	540	680	260	2130	320	435	105	98	91
4	824	285	1240	500	620	250	1650	306	914	186	81	63
5	587	307	1000	480	580	250	1630	367	614	464	81	56
6	484	298	940	450	560	240	1580	648	469	263	94	56
7	392	311	838	452	540	240	1540	535	388	189	320	56
8	320	5860	721	452	500	240	1430	511	728	146	372	56
9	608	12100	655	7850	470	230	1180	923	1030	130	255	58
10	1120	3670	607	4550	450	230	1030	976	976	117	143	58
11	688	2330	560	2260	430	240	958	759	684	114	110	58
12	534	1650	540	1570	410	250	967	641	475	114	141	58
13	436	1210	560	1240	390	300	897	580	419	96	149	59
14	386	1000	740	960	370	600	830	648	441	89	103	59
15	515	880	2610	860	360	2160	706	5120	372	96	96	59
16	534	713	1960	740	350	1840	587	3570	338	91	85	59
17	1510	634	1290	680	350	1240	511	3940	276	98	75	59
18	1360	728	1050	620	350	1040	464	3830	259	100	63	59
19	983	607	940	580	340	940	499	2830	255	94	59	244
20	1580	517	814	540	330	1120	1510	1930	240	83	59	221
21	1090	447	940	520	320	1300	1160	1390	217	75	59	138
22	858	452	1420	500	300	2630	838	1080	251	75	58	127
23	711	430	1010	440	290	2630	713	814	203	75	58	117
24	601	414	880	480	280	2940	620	1390	183	75	56	107
25	484	403	1120	700	270	2280	554	2660	164	81	59	96
26	425	1450	1520	2740	270	1760	505	1610	158	81	59	89
27	442	1300	949	3270	260	7450	458	1080	161	75	58	83
28	392	940	863	1990	260	6540	419	863	161	75	59	63
29	340	790	931	1600	---	4450	3[illegible]	743	141	75	59	59
30	315	736	880	1230	---	3500	353	600	125	75	63	59
31	294	---	774	1030	---	2690	---	561	---	85	96	---
TOTAL	23497	41313	34512	41142	12030	50360	31431	41887	12215	3641	3269	2711
MEAN	758	1377	1113	1327	430	1625	1048	1351	407	117	105	90.4
MAX	3000	12100	2610	7850	900	7450	2860	5120	1030	464	372	244
MIN	294	281	540	450	260	230	353	306	125	75	56	56

CAL YR 1977 TOTAL 262338 MEAN 719 MAX 12100 MIN 44
WTR YR 1978 TOTAL 298008 MEAN 816 MAX 12100 MIN 56

01368000 WALLKILL RIVER NEAR UNIONVILLE, NY

LOCATION.--Lat 41°15'36", long 74°32'56", Sussex County, New Jersey, Hydrologic Unit 02020007, on right bank on downstream side of bridge on the Bassetts Bridge Road, 0.6 mi (1.0 km) upstream from small tributary, 2.0 mi (3.2 km) south of the New York-New Jersey State line, and 3.0 mi (4.8 km) south of Unionville. Water-quality sampling site at discharge station.

DRAINAGE AREA.--140 mi^2 (363 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1937 to current year.

REVISED RECORDS.--WSP 2102: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 390 ft (119 m), from topographic map. Prior to Nov. 16, 1949, nonrecording gage at same site and datum.

REMARKS.--Records fair except those for winter periods, which are poor, and periods of recession above 600 ft^3/s (17 m^3/s), which may be as much as 35 percent in error. Water diverted from Morris Lake, upstream from station, by the Newton Water and Sewer Authority for municipal use in New Jersey. After use, the water is released into Paulins Kill (Delaware River basin). Diversion records available from the Delaware River Basin Commission.

AVERAGE DISCHARGE.--41 years, 217 ft^3/s (6.145 m^3/s), 21.05 in/yr (535 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,880 ft^3/s (195 m^3/s) Aug. 19, 1955, gage height, 13.35 ft (4.069 m); minimum daily, 4.2 ft^3/s (0.12 m^3/s) Aug. 8-10, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,200 ft^3/s (34.0 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Jan. 10	2230	*2,060	58.3	*9.33	2.844	Mar. 28	1500	2,000	56.6	9.32	2.810

Minimum discharge, 20 ft^3/s (0.57 m^3/s) Sept. 8, gage height, 3.00 ft (0.914 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	81	90	509	240	575	100	800	112	215	54	27	50
2	194	85	730	220	473	96	600	108	192	48	29	40
3	175	85	745	200	413	94	573	105	178	45	30	31
4	127	86	578	190	349	92	464	102	333	49	31	28
5	102	93	428	180	300	90	428	133	295	60	32	25
6	88	86	373	180	280	90	388	201	207	68	33	24
7	85	95	346	180	270	88	370	182	167	71	37	21
8	78	411	250	230	260	88	368	157	278	63	126	21
9	142	778	220	676	240	88	321	194	317	54	330	28
10	358	862	209	1720	230	88	288	258	312	49	240	30
11	265	606	170	2000	220	90	263	211	205	45	130	25
12	180	444	160	1400	200	100	267	167	165	43	100	25
13	142	317	178	1100	190	150	254	151	151	39	140	28
14	126	252	213	860	180	250	226	205	161	37	150	25
15	247	220	495	740	170	500	201	598	135	38	100	23
16	265	142	724	600	160	700	188	721	113	43	78	26
17	243	166	640	560	150	600	182	772	102	47	69	28
18	238	335	511	520	150	450	177	897	96	48	60	31
19	197	301	411	470	140	440	175	980	180	49	50	90
20	267	228	374	450	140	480	252	840	178	49	45	117
21	245	203	411	440	130	580	286	620	120	44	42	69
22	192	217	620	430	130	700	241	477	127	40	38	57
23	165	211	617	420	120	1000	194	363	117	37	30	68
24	140	224	452	410	120	1100	171	368	91	33	28	54
25	129	265	516	400	110	1000	159	585	77	29	26	45
26	122	331	706	580	110	1000	151	634	69	26	26	39
27	120	426	600	300	100	1370	142	504	72	25	26	31
28	117	344	350	1100	100	1920	137	385	72	25	25	28
29	106	284	310	1010	---	1600	129	314	63	26	28	26
30	98	278	280	900	---	1300	120	269	59	26	28	24
31	93	---	260	886	---	1000	---	232	---	27	34	---
TOTAL	5127	8465	13386	20202	6010	17244	8515	11845	4847	1337	2168	1157
MEAN	165	282	432	652	215	556	284	382	162	43.1	69.9	38.6
MAX	358	862	745	2000	575	1920	800	980	333	71	330	117
MIN	78	85	160	180	100	88	120	102	59	25	25	21
CFSM	1.18	2.01	3.09	4.66	1.54	3.97	2.03	2.73	1.16	.31	.50	.28
IN.	1.36	2.25	3.56	5.37	1.60	4.58	2.26	3.15	1.29	.36	.58	.31

CAL YR 1977 TOTAL 79537 MEAN 218 MAX 1790 MIN 12 CFSM 1.56 IN 21.13
WTR YR 1978 TOTAL 100297 MEAN 275 MAX 2000 MIN 21 CFSM 1.96 IN 26.65

01368000 WALLKILL RIVER NEAR UNIONVILLE, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1963 to current year.
SEDIMENT ANALYSES: Water year 1971.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources after October 1975. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)
OCT 19...	1030	192	330	7.5	7.5	2	8.8	--	700	79	130
MAR 01...	1100	128	360	7.7	.0	3	12.1	4.0	70	130	150
APR 13...	1115	256	288	7.6	14.0	3	9.5	1.0	11	6	110
MAY 04...	1315	102	348	--	--	5	--	--	--	--	--
JUN 22...	1120	133	368	7.6	22.0	3	7.0	7.0	490	540	140
JUL 17...	1245	50	395	--	--	1	--	--	--	--	160
AUG 02...	1200	33	429	--	--	1	--	--	--	--	180
SEP 18...	1130	33	475	--	--	--	--	--	--	--	200

DATE	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)
OCT 19...	--	35	9.7	12	2.2	--	--	43	22	--	--
MAR 01...	--	37	13	14	1.4	--	--	29	29	--	--
APR 13...	--	29	9.6	13	1.5	--	--	24	25	--	--
MAY 04...	--	--	--	--	--	--	--	25	28	--	--
JUN 22...	--	35	12	12	1.6	--	--	19	26	--	--
JUL 17...	--	40	15	14	2.0	--	--	24	26	--	--
AUG 02...	--	43	18	17	2.4	--	--	24	32	--	--
SEP 18...	42	48	20	16	2.2	160	.0	--	--	.1	5.3

DATE	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)
OCT 19...	195	5	.43	.01	.44	.03	.74	1.2	.07	.01
MAR 01...	212	3	.65	.01	.66	.11	.17	.94	.04	.01
APR 13...	171	3	.47	.01	.48	.01	.40	.89	.02	.01
MAY 04...	--	32	.47	.01	.48	.06	.37	.91	.05	.00
JUN 22...	215	27	.54	.02	.56	.08	1.0	1.7	.16	.03
JUL 17...	254	13	--	--	1.0	.10	.30	1.4	--	--
AUG 02...	291	6	--	--	1.0	.10	.50	1.6	--	--
SEP 18...	289	--	--	--	1.0	<.10	--	--	--	--

01368000 WALLKILL RIVER NEAR UNIONVILLE, NY--Continued

WATER-QUALITY RECORDS

DATE	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)
SEP											
18...	60	2	0	0	<10	10	10	<10	4	10	460

DATE	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)
SEP											
18...	6600	20	90	390	<.5	.0	9	20	0	30	170

DATE	PHENOLS (UG/L)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	PCN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDOSULFAN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)
MAY												
04...	2	--	--	--	--	--	--	--	--	--	--	--
SEP												
18...	0	0	.0	.0	0	.4	1.4	.8	.0	.0	.0	.0

DATE	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
MAY											
04...	--	--	--	--	--	--	--	--	--	--	--
SEP											
18...	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0

01369500 QUAKER CREEK AT FLORIDA, NY

LOCATION.--Lat 41°20'21", long 74°21'45", Orange County, Hydrologic Unit 02020007, on right bank at downstream side of private bridge, just downstream from Browns Creek, at Florida, and 5.0 mi (8.0 km) southwest of Goshen.

DRAINAGE AREA.--9.74 mi² (25.2 km²).

PERIOD OF RECORD.--September 1937 to current year.

REVISED RECORDS.--WSP 951: 1938(M).

GAGE.--Water-stage recorder. Concrete control since August 1943. Datum of gage is 393.32 ft (119.884 m) National Geodetic Vertical Datum of 1929 (levels by Soil Conservation Service). Prior to Dec. 12, 1949, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods, which are poor. Minor amount of diversion upstream during low-flow periods for irrigation purposes. Some diversion from Glenmore Lake for village of Florida water supply.

AVERAGE DISCHARGE.--41 years, 12.8 ft³/s (0.362 m³/s), 17.85 in/yr (453 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,050 ft³/s (29.7 m³/s) Sept. 21, 1938, gage height, 6.0 ft (1.83 m), from floodmarks, from rating curve extended above 230 ft³/s (6.51 m³/s) on basis of contracted-opening measurement at gage height 5.8 ft (1.77 m); minimum, no flow Aug. 30, 1966 (result of temporary pumping from gage pool).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 200 ft³/s (5.7 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Nov. 8	1545	*350	9.91	*3.74	1.140	Jan. 26	1145	229	6.49	3.25	0.991
Jan. 9	0730	288	8.16	3.53	1.076	Mar. 27	0500	262	7.42	3.41	1.039

Minimum discharge, 0.26 ft³/s (0.007 m³/s) Sept. 8, gage height, 1.30 ft (0.396 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.5	1.7	83	12	18	3.3	36	3.7	13	1.2	1.0	1.4
2	3.7	1.7	40	11	16	3.2	31	3.2	10	1.0	.96	.96
3	3.0	1.7	29	9.0	14	3.1	26	3.0	16	1.3	.88	.74
4	2.1	1.9	26	7.8	10	3.1	25	3.0	28	7.3	1.7	.68
5	1.6	1.9	21	8.0	9.6	3.0	24	17	13	3.0	1.7	.68
6	1.4	1.9	24	8.0	9.6	3.0	20	11	9.9	1.6	2.8	.68
7	1.4	6.5	17	7.6	13	2.9	24	11	9.4	1.4	6.5	.61
8	1.2	195	15	13	10	2.8	20	8.6	17	1.2	9.9	.68
9	11	133	13	178	9.6	2.8	17	14	14	1.0	4.8	.68
10	8.6	61	11	100	9.2	2.8	15	12	9.0	.96	3.7	.61
11	4.2	42	10	70	8.8	2.9	15	8.6	6.5	.88	2.8	.61
12	3.5	29	9.1	50	9.4	4.0	15	7.3	5.4	.81	3.5	1.0
13	2.8	23	9.9	38	9.0	7.0	12	6.9	8.1	.88	2.8	.74
14	3.5	19	20	29	6.6	33	9.9	59	5.8	.81	2.1	.68
15	10	16	52	22	7.0	96	8.6	114	4.0	3.2	1.4	.68
16	6.1	15	33	18	6.6	55	7.7	86	3.2	1.2	1.0	.68
17	9.9	18	24	16	6.4	30	6.9	84	2.8	1.7	.88	.68
18	6.9	21	19	15	6.4	23	6.5	75	2.8	1.3	.81	.88
19	5.4	14	22	14	6.2	32	8.1	58	6.9	1.0	.74	3.2
20	9.4	12	19	13	6.2	48	29	40	5.8	.88	.68	1.4
21	6.9	12	52	12	5.8	98	16	32	3.5	.81	.68	1.0
22	5.1	14	41	11	5.4	144	11	25	4.0	.81	.68	2.5
23	4.0	12	28	11	5.0	116	9.0	21	2.5	.74	.68	2.3
24	3.0	14	21	10	4.2	91	8.1	60	2.1	.74	.61	1.4
25	2.8	11	58	15	4.5	56	6.9	68	1.7	.68	.68	1.3
26	2.8	52	35	100	4.5	59	6.1	37	1.6	.68	.68	1.2
27	3.2	18	21	95	3.6	217	5.8	29	1.6	.74	.61	1.2
28	2.8	15	17	47	3.5	110	5.4	24	1.4	1.2	.61	1.0
29	2.3	13	14	31	---	80	4.8	20	1.4	.74	.68	1.0
30	2.1	16	13	25	---	60	4.0	17	1.3	.68	.61	1.0
31	1.7	---	13	21	---	45	---	14	---	1.0	2.5	---
TOTAL	134.9	792.3	810.0	1018.4	230.1	1436.9	433.8	972.3	211.7	41.44	59.67	32.17
MEAN	4.35	26.4	26.1	32.9	8.22	46.4	14.5	31.4	7.06	1.34	1.92	1.07
MAX	11	195	83	178	18	217	36	114	28	7.3	9.9	3.2
MIN	1.2	1.7	9.1	7.6	3.5	2.8	4.0	3.0	1.3	.68	.61	.61

CAL YR 1977 TOTAL 4478.23 MEAN 12.3 MAX 197 MIN .41
WTR YR 1978 TOTAL 6173.68 MEAN 16.9 MAX 217 MIN .61

01371500 WALLKILL RIVER AT GARDINER, NY

LOCATION.--Lat 41°41'10", long 74°09'56", Ulster County, Hydrologic Unit 02020007, on left bank 400 ft (122 m) upstream from bridge on U.S. Highway 44, 500 ft (152 m) downstream from Shawangunk Kill, and 0.7 mi (1.1 km) northwest of Gardiner.

DRAINAGE AREA.--711 mi^2 (1,841 km^2).

PERIOD OF RECORD.--September 1924 to current year.

REVISED RECORDS.--WSP 756: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 185.70 ft (56.601 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are poor.

AVERAGE DISCHARGE.--54 years, 1,059 ft^3/s (29.99 m^3/s), 20.23 in/yr (514 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 30,800 ft^3/s (872 m^3/s) Oct. 16, 1955, gage height, 19.81 ft (6.038 m); minimum, 9.5 ft^3/s (0.27 m^3/s) Sept. 28, 1964; minimum gage height, 1.59 ft (0.48 m) Aug. 14, 15, 16, 19, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 6,400 ft^3/s (181 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Nov. 9	0030	*17,500	496	13.52	4.121
Dec. 1	1530	6,650	188	7.91	2.411
Jan. 9	1600	15,100	428	12.38	3.773
Jan. 26	1800	ice jam		*14.15	4.313
Mar. 16	1130	ice jam		12.46	3.798
Mar. 21	1700	ice jam		12.43	3.789
Mar. 27	1700	15,400	436	12.52	3.816
May 16	2230	7,100	201	8.18	2.493

Minimum discharge, 88 ft^3/s (2.49 m^3/s), Sept. 9-11, gage height, 2.15 ft (0.655 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	720	386	5220	640	2500	500	5430	513	934	216	160	169
2	2700	375	5160	620	2200	490	4540	480	835	202	166	188
3	1490	365	4100	600	1900	480	3650	456	756	192	175	163
4	985	365	3610	580	2000	470	3090	432	1810	257	166	140
5	711	375	2900	580	2000	460	2800	546	1390	439	160	124
6	567	381	2370	580	2000	460	2340	1310	1060	429	163	114
7	474	403	2100	620	2000	460	2100	1210	835	331	322	107
8	426	8450	1600	680	1900	460	2060	1070	1490	269	682	95
9	904	12700	980	8400	1800	500	1740	1350	1920	230	656	91
10	1710	7220	740	5600	1600	580	1490	2000	1380	209	558	88
11	1320	5480	700	4500	1400	700	1340	1580	1050	188	459	97
12	1590	4100	1000	4000	1300	800	1270	1120	799	175	365	105
13	762	2990	2500	3500	1100	1200	1180	921	689	166	365	102
14	640	2140	3500	3000	1000	2500	1050	1040	676	154	385	102
15	720	1700	4000	2800	900	4500	921	5850	600	157	317	109
16	1180	1450	3700	2500	880	5000	852	6090	519	185	257	107
17	2050	1330	2800	2400	820	4000	794	6550	459	253	216	102
18	1570	1730	3250	2300	780	3200	745	6420	434	246	188	102
19	1280	1710	2460	2200	740	2700	753	5450	449	223	169	209
20	1390	1380	2150	2100	700	2600	2100	4420	612	195	154	282
21	1260	1140	2520	2000	680	4500	2170	3540	564	175	143	286
22	1030	1140	4030	1900	640	7000	1520	2620	541	157	132	234
23	835	1100	3460	1800	600	6200	1160	1860	465	146	122	212
24	703	1080	2910	1800	580	5600	948	2310	404	140	117	219
25	611	1060	3340	2500	560	5400	827	4320	345	137	119	195
26	574	3040	4270	7000	540	5630	745	3430	308	124	119	166
27	567	3130	2900	6000	520	12800	687	2480	291	122	114	148
28	546	2200	2000	5000	520	11500	648	1880	286	129	117	137
29	506	1790	1300	4000	---	8820	603	1470	265	127	117	127
30	456	1620	800	3400	---	7650	560	1210	238	157	129	119
31	414	---	700	3000	---	6470	---	1040	---	163	135	---
TOTAL	30691	72330	83070	86600	34160	113630	50113	74968	22404	6293	7447	4439
MEAN	990	2411	2680	2794	1220	3665	1670	2418	747	203	240	148
MAX	2700	12700	5220	8400	2500	12800	5430	6550	1920	439	682	286
MIN	414	365	700	580	520	460	560	432	238	122	114	88

CAL YR 1977 TOTAL 509030 MEAN 1395 MAX 12700 MIN 67
WTR YR 1978 TOTAL 586145 MEAN 1606 MAX 12800 MIN 88

01372035 HUDSON RIVER AT STAATSBURG, NY

LOCATION.--Lat 41°50'06", long 73°56'34", Dutchess-Ulster Counties, Hydrologic Unit 02020008, 0.3 mi (0.5 km) upstream from the stage gage at Norrie Yacht Basin in Norrie State Park at mouth of Indian Kill, and 1.1 mi (1.8 km) southwest of Staatsburg.

DRAINAGE AREA.--11,629 mi² (30,119 km²).

PERIOD OF RECORD.--March to September 1978.
PESTICIDE DATA: 1978 (c).
ORGANIC DATA: PCB--1978 (c).
PCN--1978 (c).
NUTRIENT DATA: 1978 (c).

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)	SOLIDS, VOLATILE, SUSPENDED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)
MAR 31...	1130	109	8	.58	.13	.71	.13	4900	220
APR 19...	0900	32	6	.58	.30	.88	.05	1200	10
MAY 05...	0930	20	3	.47	.27	.74	.04	670	9
JUN 22...	1045	21	16	.80	.41	1.2	.06	790	10
JUL 20...	0845	17	0	.54	.40	.94	.06	600	7
AUG 09...	1200	18	0	.23	1.5	1.7	.09	650	2
SEP 12...	0900	32	5	.41	.52	.93	--	1000	17

DATE	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	PCB, TOTAL (UG/L)	NAPHTHALENES, POLYCHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLORDANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DIELDRIN TOTAL (UG/L)
MAR 31...	120	.3	.00	.00	.0	.00	.00	.00	.00
APR 19...	40	.1	.00	.00	.0	.00	.00	.00	.00
MAY 05...	30	.1	.00	.00	.0	.00	.00	.00	.00
JUN 22...	60	.2	.00	.00	.0	.00	.00	.00	.00
JUL 20...	50	.1	.00	.00	.0	.00	.00	.00	.00
AUG 09...	70	.0	.00	.00	.0	.00	.00	.00	.00
SEP 12...	70	.2	.00	.00	.0	.00	.00	.00	.00

DATE	ENDOSULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	HEPTACHLOR, TOTAL (UG/L)	HEPTACHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	MIREX, TOTAL (UG/L)	TOXAPHENE, TOTAL (UG/L)	SEDIMENT, SUSPENDED (MG/L)
MAR 31...	--	.00	.00	.00	.00	.00	0	65
APR 19...	--	.00	.00	.00	.00	.00	0	24
MAY 05...	--	.00	.00	.00	.00	.00	0	--
JUN 22...	.00	.00	.00	.00	.00	.00	0	46
JUL 20...	.00	.00	.00	.00	.00	.00	0	--
AUG 09...	.00	.00	.00	.00	.00	.00	0	26
SEP 12...	.00	.00	.00	.00	.00	.00	0	32

01372059 HUDSON RIVER AT CLINTON POINT NEAR NEW HAMBURG, NY

LOCATION.--Lat 41°37'27", long 73°56'55", Dutchess-Ulster Counties, Hydrologic Unit 02020008, opposite northernmost building of New York Trap Rock Corporation's crushing plant, 600 ft (183 m) downstream from stage gage, 2.3 mi (3.7 km) north of New Hamburg, and 2.8 mi (4.5 km) upstream from Wappinger Creek.

DRAINAGE AREA.--11,745 mi² (30,420 km²).

PERIOD OF RECORD.--Water years 1964, 1965, and current year.
CHEMICAL DATA: 1964-65 (a).
PESTICIDE DATA: 1978 (c).
ORGANIC DATA: PCB--1978 (c).
PCN--1978 (c).
NUTRIENT DATA: 1978 (c).

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)	SOLIDS, VOLATILE, SUSPENDED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)
MAR									
31...	1430	79	1	.61	.49	1.1	.10	3600	14
APR									
19...	1015	27	10	.54	.25	.79	.05	1100	14
MAY									
05...	1130	33	6	.53	.36	.89	.05	1300	18
JUN									
22...	0930	31	15	1.2	.39	1.6	.06	830	8
JUL									
20...	1130	15	0	.74	.37	1.1	.06	660	13
AUG									
09...	0915	3	30	.55	.89	1.4	.07	810	30
SEP									
12...	1015	13	5	.55	.43	.98	--	480	30

DATE	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	PCB, TOTAL (UG/L)	NAPHTHALENES, POLYCHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLORDANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DIELDRIN TOTAL (UG/L)
MAR									
31...	90	.1	.00	.00	.0	.00	.00	.00	.00
APR									
19...	30	.0	.00	.00	.0	.00	.00	.00	.00
MAY									
05...	50	.2	.00	.00	.0	.00	.00	.00	.00
JUN									
22...	50	.1	.00	.00	.0	.00	.00	.00	.00
JUL									
20...	30	.1	.00	.00	.0	.00	.00	.00	.00
AUG									
09...	--	.2	.00	.00	.0	.00	.00	.00	.00
SEP									
12...	50	.2	.00	.00	.0	.00	.00	.00	.00

DATE	ENDOSULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	HEPTACHLOR, TOTAL (UG/L)	HEPTACHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	MIREX, TOTAL (UG/L)	TOXAPHENE, TOTAL (UG/L)	SEDIMENT, SUSPENDED (MG/L)
MAR								
31...	--	.00	.00	.00	.00	.00	0	65
APR								
19...	--	.00	.00	.00	.00	.00	0	22
MAY								
05...	--	.00	.00	.00	.00	.00	0	38
JUN								
22...	.00	.00	.00	.00	.00	.00	0	30
JUL								
20...	.00	.00	.00	.00	.00	.00	0	12
AUG								
09...	.00	.00	.00	.00	.00	.00	0	25
SEP								
12...	.00	.00	.00	.00	.00	.00	0	21

01372500 WAPPINGER CREEK NEAR WAPPINGERS FALLS, NY

LOCATION.--Lat 41°39'11", long 73°52'23", Dutchess County, Hydrologic Unit 02020008, on left bank 700 ft (213 m) downstream from Red Oak Mill dam, and 4.5 mi (7.2 km) northeast of village of Wappingers Falls.

DRAINAGE AREA.--181 mi² (469 km²).

PERIOD OF RECORD.--May 1903 to June 1905 (gage heights only during some winter months), August 1928 to current year.

REVISED RECORDS.--WSP 741: 1932. WSP 1902: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 114.37 ft (34.860 m) National Geodetic Vertical Datum of 1929, (levels by Corps of Engineers). May 1903 to June 1905 staff gage at site 2.5 mi (4.0 km) downstream at different datum. Aug. 7, 1928 to Sept. 25, 1931, water-stage recorder at site 2 mi (3 km) downstream at different datum.

REMARKS.--Records fair except those for winter periods, which are poor.

AVERAGE DISCHARGE.--50 years (1929-78), 254 ft³/s (7.193 m³/s), 19.06 in/yr (484 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,600 ft³/s (527 m³/s) Aug. 19, 1955, gage height, 19.60 ft (5.974 m), from floodmarks in gage shelter, from rating curve extended above 5,000 ft³/s (140 m³/s) on basis of flow-over-dam and contracted-opening measurement at gage height 18.02 ft (5.492 m) and contracted-opening and flow-over-road measurement at gage height 19.60 ft (5.974 m); minimum, 0.90 ft³/s (0.025 m³/s) Sept. 20, 21, 1964, gage height, 2.05 ft (0.625 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,500 ft³/s (42 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Nov. 9	0145	1,820	51.5	6.34	1.932
Jan. 9	2100	2,380	67.4	7.06	2.152
Jan. 26	1815	*2,820	79.9	*7.59	2.313
Mar. 24	0230	1,640	46.4	6.09	1.856
Mar. 28	0345	2,360	66.8	7.04	2.146

Minimum discharge, 17 ft³/s (0.481 m³/s) Sept. 16, gage height, 2.47 ft (0.753 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	104	137	909	381	540	110	896	137	299	92	37	43
2	164	130	988	363	450	100	797	133	252	83	37	44
3	157	127	797	310	380	100	657	130	239	80	35	37
4	127	127	708	280	340	96	585	123	307	99	38	32
5	109	145	602	280	320	94	550	150	256	108	42	27
6	115	133	585	277	300	94	496	210	226	95	45	24
7	99	123	523	266	280	94	455	174	199	95	135	23
8	86	676	431	266	270	94	422	150	385	92	152	21
9	162	1610	399	1550	260	94	376	177	670	79	102	20
10	372	1080	363	1670	240	100	343	256	657	72	74	19
11	263	846	250	1070	230	110	318	213	485	82	60	19
12	199	639	240	826	220	128	318	180	376	74	54	18
13	167	523	307	663	210	172	303	167	322	64	54	18
14	152	465	343	590	200	303	270	169	385	58	49	19
15	219	412	1010	550	190	1110	245	263	299	58	45	18
16	216	376	1040	430	180	1060	229	334	252	58	41	19
17	280	372	871	410	180	818	213	507	219	59	37	19
18	417	485	715	380	170	645	204	480	207	60	34	19
19	343	408	632	350	170	614	210	445	288	51	32	82
20	408	351	567	300	160	790	330	363	273	46	30	102
21	343	322	639	290	150	909	307	338	216	43	27	69
22	288	318	916	290	140	1430	252	303	270	41	24	58
23	249	291	728	290	130	1440	222	263	229	38	23	54
24	219	277	620	290	130	1480	199	343	188	35	22	46
25	199	263	769	310	120	1200	185	877	162	34	36	38
26	180	620	975	1300	120	995	177	689	143	32	41	34
27	190	742	728	2200	120	1490	164	517	137	32	35	30
28	177	579	520	1550	110	2070	164	426	126	35	30	28
29	164	491	450	1110	---	1600	157	363	113	41	29	26
30	159	450	430	896	---	1250	150	314	100	39	28	25
31	143	---	412	695	---	1030	---	288	---	35	34	---
TOTAL	6470	13518	19467	20433	6310	21620	10199	9482	8280	1910	1462	1031
MEAN	209	451	628	659	225	697	340	306	276	61.6	47.2	34.4
MAX	417	1610	1040	2200	540	2070	896	877	670	108	152	102
MIN	86	123	240	266	110	94	150	123	100	32	22	18
CFSM	1.16	2.49	3.47	3.64	1.24	3.85	1.88	1.69	1.53	.34	.26	.19
IN.	1.33	2.78	4.00	4.20	1.30	4.44	2.10	1.95	1.70	.39	.30	.21

CAL YR 1977 TOTAL 126390 MEAN 346 MAX 3040 MIN 16 CFSM 1.91 IN 25.98
WTR YR 1978 TOTAL 120182 MEAN 329 MAX 2200 MIN 18 CFSM 1.82 IN 24.70

01375000 CROTON RIVER AT NEW CROTON DAM, NEAR CROTON-ON-HUDSON, NY

LOCATION.--Lat 41°13'32", long 73°51'32", Westchester County, Hydrologic Unit 02030101, on left bank 1,000 ft (305 m) downstream from New Croton Dam, and 1.8 mi (2.9 km) northeast of Croton-On-Hudson.

DRAINAGE AREA.--378 mi² (979 km²).

PERIOD OF RECORD.--August 1933 to current year. Prior to Oct. 1, 1941, published as "at Quaker Bridge," (low-flow records at this site are not equivalent owing to well pumpage upstream). Fragmentary records published during August 1933 to September 1941 for "at Cornell Dam near Croton" and "at New Croton near Croton" are equivalent. Oct. 1, 1941 to Sept. 30, 1955 published as "at New Croton Dam near Croton".

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 50 ft (15 m), from topographic map. Prior to Oct. 1, 1941, supplementary water-stage recorder and concrete control at site 1.1 mi (1.8 km) downstream at Quaker Bridge.

REMARKS.--Records poor. Entire flow, except for periods of spilling and releases to augment Croton-on-Hudson water supply, diverted from New Croton Reservoir for municipal supply of City of New York.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 45,400 ft³/s (1,290 m³/s) Oct. 16, 1955, gage height, 18.44 ft (5.621 m), from floodmarks, from rating curve extended above 9,700 ft³/s (275 m³/s) on basis of slope-area measurements of peak flow; minimum daily, 0.1 ft³/s (0.003 m³/s) Mar. 14, 1965.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,320 ft³/s (151 m³/s) Nov. 9, gage height, 7.45 ft (2.271 m); minimum daily, 0.67 ft³/s (0.02 m³/s) Mar. 6-9; minimum gage height, 0.54 ft (0.165 m) Aug. 21, 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.93	6.6	894	880	1200	797	1440	152	789	3.0	1.4	1.3
2	.93	7.0	1020	880	1050	797	1270	138	622	3.1	1.4	1.3
3	.97	9.9	1170	880	916	317	1080	136	606	3.6	1.5	1.3
4	1.0	5.2	1120	880	887	.77	1010	138	1070	76	1.6	1.3
5	1.1	6.0	1060	887	887	.70	999	335	846	275	1.4	1.5
6	.97	7.0	1060	887	887	.67	902	483	614	175	1.4	2.1
7	.97	97	968	880	887	.67	805	408	491	102	2.1	2.3
8	.97	1740	902	880	887	.67	727	348	639	53	159	4.0
9	1.0	3890	894	887	887	.67	639	735	614	10	394	4.2
10	.97	1990	894	887	887	.73	550	813	499	1.9	287	3.7
11	94	1740	894	894	887	.73	491	639	387	1.4	175	2.9
12	92	1440	894	894	880	.93	499	507	323	1.4	175	2.9
13	39	1200	894	894	880	1.1	460	445	269	1.5	125	2.9
14	68	1010	894	894	880	2.6	415	743	211	1.5	54	2.9
15	27	863	887	894	880	9.7	360	3860	159	1.6	3.9	3.0
16	41	797	894	894	871	15	335	3710	135	1.5	5.0	2.9
17	138	946	887	894	871	14	306	3500	119	1.8	7.7	2.9
18	141	1340	887	894	863	14	300	2990	105	1.5	6.0	2.9
19	105	1040	887	894	863	15	367	2500	119	9.9	1.6	3.2
20	231	902	887	894	855	15	743	1890	135	28	1.5	2.9
21	252	894	894	894	855	21	750	1570	89	11	1.2	2.9
22	159	894	894	894	846	26	631	1310	82	2.8	1.8	3.1
23	94	894	894	894	838	13	491	1110	62	2.8	1.1	3.1
24	34	894	894	894	830	639	415	1390	37	3.4	1.2	3.1
25	13	894	894	894	821	1600	360	2610	14	3.6	1.5	3.4
26	12	894	968	1160	821	1520	300	2150	4.8	2.9	1.3	2.7
27	27	894	1010	3420	805	2690	269	1610	14	1.4	3.7	2.7
28	38	902	887	2650	805	3150	236	1400	15	1.4	1.3	2.7
29	39	894	871	2170	---	2440	197	1190	5.9	1.4	1.3	2.8
30	9.1	894	880	1740	---	1970	179	1010	3.2	1.4	1.3	2.8
31	7.7	---	871	1430	---	1630	---	880	---	1.4	1.4	---
TOTAL	1670.61	27984.7	28844	34808	24726	17702.94	17526	40702	9078.9	786.2	1422.6	81.7
MEAN	53.9	933	930	1123	883	571	584	1313	303	25.4	45.9	2.72
MAX	252	3890	1170	3420	1200	3150	1440	3860	1070	275	394	4.2
MIN	.93	5.2	871	880	805	.67	179	138	3.2	1.4	1.1	1.3

CAL YR 1977 TOTAL 160978.43 MEAN 441 MAX 5210 MIN .27
WTR YR 1978 TOTAL 205333.65 MEAN 563 MAX 3890 MIN .67

01376280 SPARKILL CREEK AT SPARKILL, NY

LOCATION.--Lat 41°01'44", long 73°55'34", Rockland County, Hydrologic Unit 02030101, on right downstream wingwall of New Street Bridge, at Sparkill, 1.25 mi (2.0 km) upstream from mouth, and 1.25 mi (2.0 km) downstream from Sparkill Brook.

DRAINAGE AREA.--11.1 mi^2 (28.7 km^2).

PERIOD OF RECORD.--September 1959 to September 1963, May 1964 to September 1968, August 1976 to September 1978 (no winter records), discontinued.

GAGE.--Water-stage recorder. Datum of gage is 18.41 ft (5.611 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for March, April and May, which are poor. Sewage effluent enters creek upstream. Occasional diversion upstream from gage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,040 ft^3/s (29.4 m^3/s) Nov. 8, 1977, gage height, 6.74 ft (2.054 m), from rating curve extended above 300 ft^3/s (8.50 m^3/s) on basis of contracted-opening measurement of peak flow; minimum, 1.3 ft^3/s (0.037 m^3/s), Aug. 12, 1977, gage height, 0.38 ft (0.116 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 200 ft^3/s (5.66 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Nov. 8	2300	*1,040	29.4	*6.74	2.054	Mar. 27	1145	214	6.06	3.16	0.963
Dec. 21	1900	200	5.66	3.07	.936	May 15	0230	262	7.42	3.44	1.049
Jan. 26	1545	542	15.3	4.67	1.423	May 24	2100	233	6.60	3.27	.997

Minimum discharge, 2.7 ft^3/s (0.076 m^3/s) Oct. 9, gage height, 0.50 ft (0.152 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	7.9				10	22	9.4	16	10	8.7	28
2	17	8.2				9.5	19	9.0	13	10	7.7	8.0
3	8.5	7.9				9.5	16	9.0	14	12	14	6.8
4	5.5	8.2				10	16	8.4	39	111	49	6.6
5	4.7	9.0				10	20	27	15	21	12	6.6
6	5.5	8.7				9.2	16	22	12	12	11	6.6
7	4.5	27				8.7	16	19	14	9.8	51	6.6
8	3.6	430				8.5	16	18	16	8.7	100	7.7
9	84	200				9.5	14	80	13	8.2	19	8.7
10	50	100				11	13	35	10	8.2	12	6.2
11	16	55				18	13	29	9.5	7.7	10	6.8
12	11	32				31	16	25	9.0	6.0	15	13
13	8.7	25				40	13	22	9.5	5.8	11	10
14	22	20				63	12	80	8.2	6.0	10	6.0
15	38	18				89	11	190	7.5	22	9.8	7.7
16	17	17				47	11	100	7.7	8.5	9.0	6.6
17	19	41				36	10	90	9.0	12	9.0	6.4
18	12	33				28	9.6	72	9.5	7.5	8.2	8.0
19	18	20				32	32	60	12	6.4	7.7	27
20	52	18				37	56	50	11	6.0	8.0	8.2
21	24	17				46	23	45	10	5.8	8.5	7.0
22	15	19				72	17	40	11	5.4	8.5	9.8
23	12	33				46	15	35	11	5.2	9.0	7.5
24	9.9	24				48	14	120	10	5.2	8.7	6.2
25	9.3	18				31	13	190	10	4.8	9.0	5.6
26	14	94				36	12	60	12	4.8	9.0	5.2
27	12	34				176	11	50	12	4.8	8.7	5.0
28	10	25				66	11	35	11	6.0	9.8	5.2
29	9.3	21				38	10	25	10	4.8	9.8	4.8
30	8.5	33				29	10	17	11	4.1	9.2	4.8
31	8.2	---				24	---	18	---	11	13	---
TOTAL	539.2	1403.9	---	---	---	1128.9	487.6	1589.8	362.9	360.7	485.3	252.6
MEAN	17.4	46.8	---	---	---	36.4	16.3	51.3	12.1	11.6	15.7	8.42
MAX	84	430	---	---	---	176	56	190	39	111	100	28
MIN	3.6	7.9	---	---	---	8.5	9.6	8.4	7.5	4.1	7.7	4.8
CFSM	1.57	4.22	---	---	---	3.28	1.47	4.62	1.09	1.05	1.41	.76
IN.	1.81	4.70	---	---	---	3.78	1.63	5.33	1.22	1.21	1.63	.85

01376500 SAW MILL RIVER AT YONKERS, NY

LOCATION.--Lat 40°56'11", long 73°53'12", Westchester County, Hydrologic Unit 02030101, on left bank in Yonkers, just upstream from Old Croton aqueduct, near intersection of Nepperhan Avenue and Center Street, and 1.2 mi (1.9 km) upstream from mouth.

DRAINAGE AREA.--25.6 mi² (66.3 km²).

PERIOD OF RECORD.--November 1943 to September 1973, April 1974 to current year.

REVISED RECORDS.--WRD NY 1971: 1965, 1966.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 90.99 ft (27.734 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair, and those after August 17, which are poor. Flow affected by diversion by city of Yonkers, village of Tarrytown, and several industries for water supply and industrial purposes. Diurnal fluctuations caused by water supply and industrial operations.

COOPERATION.--Figures for diversion and return in upstream water supply furnished by city of Yonkers and village of Tarrytown.

AVERAGE DISCHARGE.--33 years (1944-73, 1975-78), 32.1 ft³/s (0.909 m³/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,020 ft³/s (28.9 m³/s) Sept. 27, 1975, gage height, 7.26 ft (2.213 m); minimum, 0.05 ft³/s (0.001 m³/s) Dec. 27, 1946, gage height, 0.37 ft (0.113 m); minimum daily, 0.2 ft³/s (0.006 m³/s) Jan. 1, 1944, Sept. 5, Oct. 19, 1945.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 678 ft³/s (19.2 m³/s) Nov. 9, gage height, 6.67 ft (2.033 m); minimum daily, 3.0 ft³/s (0.085 m³/s) Sept. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	28	228	52	66	23	75	31	59	13	53	80
2	38	28	131	52	63	21	68	30	48	11	23	20
3	11	28	96	50	58	21	59	29	52	16	61	12
4	6.4	31	85	46	52	19	58	29	112	184	110	6.0
5	4.0	29	97	44	49	18	66	63	57	52	30	3.2
6	5.1	27	135	43	46	17	54	46	43	27	27	3.2
7	5.8	59	87	41	45	14	53	36	36	24	93	3.2
8	3.6	376	69	65	43	14	49	33	47	14	181	3.2
9	162	599	73	216	41	15	44	117	41	11	37	3.1
10	103	224	66	96	40	21	41	57	38	11	19	3.0
11	33	173	56	64	39	24	38	41	35	11	14	7.0
12	21	111	51	54	37	50	44	33	33	9.8	25	3.2
13	14	90	52	54	36	66	36	37	35	9.4	19	36
14	36	84	97	149	35	90	33	115	34	8.6	12	7.0
15	76	71	170	76	34	141	30	239	27	66	9.4	7.0
16	33	66	81	59	32	78	26	152	26	26	5.5	5.0
17	66	101	68	54	31	55	27	154	24	23	5.1	4.0
18	46	102	62	180	30	54	27	149	24	22	5.0	3.2
19	48	69	81	86	29	54	98	129	29	15	5.0	88
20	109	59	69	52	28	66	116	92	20	14	5.0	23
21	65	57	211	71	28	73	51	79	17	6.4	5.0	15
22	48	64	178	59	27	108	40	69	18	4.2	5.0	15
23	39	85	97	50	27	95	35	62	18	3.9	5.4	9.0
24	38	66	87	48	26	85	34	149	17	4.0	5.2	5.0
25		56	98	101	26	71	34	237	14	3.8	5.0	3.2
26	44	201	91	450	25	78	37	149	19	3.5	5.0	3.2
27	46	104	71	368	24	293	37	96	27	4.0	5.0	3.2
28	35	77	63	138	23	174	35	82	22	6.1	7.0	5.0
29	30	71	57	105	---	110	34	75	16	9.8	14	5.0
30	29	86	55	86	---	91	31	69	15	5.5	3.2	5.0
31	28	---	54	76	---	81	---	64	---	18	3.2	---
TOTAL	1274.9	3222	2916	3105	1042	2120	1412	2745	1005	636.9	802.0	388.9
MEAN	41.1	107	94.1	100	37.2	68.4	47.1	88.5	33.5	20.5	25.9	13.0
MAX	162	599	228	450	58	293	116	239	112	184	181	88
MIN	3.6	27	51	41	23	14	27	29	14	3.5	3.2	3.0
†	8.37	0.83	3.41	3.35	3.58	7.54	6.23	2.52	6.45	8.25	8.14	7.46

CAL YR 1977 TOTAL 16087.3 MEAN 44.1 MAX 599 MIN 1.0 † 7.16
WTR YR 1978 TOTAL 20669.7 MEAN 56.6 MAX 599 MIN 3.0 † 5.53

† Indicated net diversion, in cubic feet per second, for diversion and return in upstream supply.

Note.--No gage-neight record Aug. 18 to Sept. 30.

RESERVOIRS IN HUDSON RIVER BASIN

01335900 DELTA RESERVOIR.--Lat 43°16'20", long 75°25'50", Oneida County, Hydrologic Unit 02020004, on superstructure of gatehouse at Delta Dam on Mohawk River, and 4 mi (6 km) upstream from Rome. DRAINAGE AREA, 145 mi^2 (376 km^2). PERIOD OF RECORD, May 1913 to current year. GAGE, nonrecording gage read daily at 0800. Datum of gage is Barge Canal datum.

Dam completed Aug. 3, 1912, and controlled storage for which records are available began May 1, 1913. Usable capacity 2,800 mil ft^3 (79.3 hm^3) at crest of spillway, elevation 550.0 ft (167.64 m). Reservoir is used for navigation in Barge Canal. Records furnished by New York State Department of Transportation.

EXTREMES FOR PERIOD OF RECORD: 1951-78: Maximum contents observed, 3,136 mil ft^3 (88.8 hm^3) June 22, 1972, elevation, 552.8 ft (168.49 m); minimum observed 2.0 mil ft^3 (0.0566 hm^3) Jan. 10, 13, 16-21, Feb. 7-15, Feb. 22 to Mar. 2, 1959, elevation, 492.0 ft (149.96 m).

EXTREMES FOR CURRENT YEAR: Maximum contents observed, 3.004 mil ft^3 (85.1 hm^3) Oct. 10, elevation, 551.7 ft (168.16 m); minimum observed, 578 mil ft^3 (16.4 hm^3) Mar. 15-17, elevation, 522.2 ft (159.17 ft).

01343900 HINCKLEY RESERVOIR.--Lat 43°18'45", long 75°06'25", Oneida County, Hydrologic Unit 02020004, on south side of north gatehouse at Hinckley Dam on West Canada Creek at Hinckley, and 2.2 mi (3.5 km) east of Prospect. DRAINAGE AREA, 374 mi^2 (969 km^2). PERIOD OF RECORD, March 1914 to current year. GAGE, nonrecording gage read daily at 0800. Datum of gage is Barge Canal datum.

Reservoir is formed by earth and concrete dam; storage began March 1914. Usable capacity 3,320 mil ft^3 (94.0 hm^3) between elevation 1,173.5 (357.68 m) and 1,225.0 ft (373.38 m). Elevation of inverts of four 60-inch discharge pipes at north end of spillway is 1,169.5 ft (356.46 m), and elevation of inverts of two 42-inch pipes at south end for diverting water to city of Utica is 1,164.25 ft (354.863 m). Crest of Ogee spillway is at elevation 1,225.0 ft (373.38 m). Length of spillway is 400 ft (122 m). Area of water surface at crest elevation is 4.46 mi^2 (11.6 km^2). Records furnished by New York State Department of Transportation.

EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 4,041 mil ft^3 (114 hm^3) Oct. 2, 1945, elevation, 1,230.2 ft (374.96 m); minimum observed (after initial filling), not determined.

EXTREMES FOR CURRENT YEAR: Maximum contents observed, 3,639 mil ft^3 (103 hm^3) Oct. 3, elevation, 1,227.4 ft (374.11 m); minimum observed, 545 mil ft^3 (15.4 hm^3) Mar. 16, elevation, 1,190.4 ft (362.83 m).

01350100 SHOHARIE RESERVOIR (see station for mean daily elevations, skeleton capacity table, monthly contents and change in contents).

01363400 ASHOKAN RESERVOIR.--Lat 41°57'01", long 74°12'30", Ulster County, Hydrologic Unit 02020006, at gatehouse located at Dividing Weir Dyke, and 1.6 mi (2.6 km) south of Shokan. DRAINAGE AREA, 256 mi^2 (663 km^2). PERIOD OF RECORD, September 1913 to current year. REVISED RECORDS, WRD NY 1972: 1968. GAGE, nonrecording gage read daily at 0900. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Board of Water Supply, City of New York).

The reservoir is formed by the masonry Olive Bridge Dam across Esopus Creek and a series of earth embankments between hills. The reservoir is divided into two basins separated by a weir containing a gatehouse. Storage began Sept. 9, 1913. Usable capacity of West basin 47,180 mil gal (178.6 hm^3) between minimum operating level elevation 495.50 ft (151.028 m) and crest of spillway to East basin, elevation 590.00 ft (179.832 m); dead storage below minimum operating level 2,237 mil gal (8.467 hm^3). Usable capacity of East basin 80,678 mil gal (305.4 hm^3) between elevation 500.00 ft (152.400 m) and crest of spillway, elevation 587.10 ft (178.948 m); no dead storage. Figures given herein represent total contents for each basin. Reservoir impounds water for diversion into Catskill Aqueduct for New York City water supply (see elsewhere in this section). Any flood spillage enters the Esopus Creek channel below Olive Bridge Dam. Records furnished by Department of Environmental Protection, City of New York.

EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, in West basin, 54,001 mil gal (204.4 hm^3) Mar. 31, 1951, elevation, 594.33 ft (181.152 m), in East basin, 89,411 mil gal (338.4 hm^3) Mar. 31, 1951, elevation, 592.23 ft (180.512 m); minimum observed, in West basin, 9,098 mil gal (34.44 hm^3) Oct. 24, 1926, elevation, 530.56 ft (161.715 m), in East basin, 8,394 mil gal (31.77 hm^3) Oct. 24, 1926, elevation, 525.91 ft (160.297 m).

EXTREMES FOR CURRENT YEAR: Maximum contents observed, in West basin, 51,884 mil gal (196.4 hm^3) Nov. 9, elevation, 592.33 ft (180.542 m), in East basin, 84,771 mil gal (320.9 hm^3) Nov. 9, elevation, 589.54 ft (179.692 m); minimum observed, in West basin, 37,872 mil gal (143.3 hm^3) Sept. 30, elevation, 577.79 ft (176.110 m), in East basin, 60,166 mil gal (227.7 hm^3) Oct. 1, elevation, 574.16 ft (175.004 m).

01366400 RONDOUT RESERVOIR.--Lat 41°47'57", long 74°25'48", Ulster County, Hydrologic Unit 02020007, at release chamber at Merriman Dam on Rondout Creek, 1.1 mi (1.8 km) upstream from Brandy Brook, and 1.3 mi (2.1 km) northwest of Lackawack. DRAINAGE AREA, 94.4 mi^2 (244 km^2). PERIOD OF RECORD, May 1951 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Board of Water Supply, City of New York).

Reservoir is formed by an earthfill rockfaced dam; storage began May 10, 1951. Initial filling (to crest of spillway) Mar. 28, 1955. Usable capacity 50,048 mil gal (189 hm^3) between minimum operating level, elevation, 720.00 ft (219.45 m) and crest of spillway, elevation, 840.00 ft (256.03 m). Dead storage below elevation 720.00 ft (219.45 m), 2,387 mil gal (9.03 hm^3). Figures given herein represent total contents. Reservoir impounds water from Rondout Creek; water diverted from Cannonsville Reservoir in the Delaware River basin through West Delaware Tunnel; water diverted from Pepacton Reservoir through East Delaware Tunnel; and water diverted from Neversink Reservoir through Neversink-Grahamsville Tunnel. Water is diverted from Rondout Reservoir for New York City water supply through West Branch Tunnel of Delaware Aqueduct (see elsewhere in this section). Records furnished by Bureau of Water Resources Development, City of New York.

EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 53,355 mil gal (201.9 hm^3) June 23, 1972, elevation, 841.34 ft (256.440 m); minimum observed (after initial filling), 8,335 mil gal (31.55 hm^3) Oct. 15, 1957, elevation, 748.75 ft (228.219 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 52,313 mil gal (198.0 hm^3) May 19, elevation, 839.82 ft (255.977 m); minimum, 41,430 mil gal (156.8 hm^3) Sept. 30, elevation, 822.95 ft (250.835 m).

RESERVOIRS IN HUDSON RIVER BASIN--Continued

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

Date	Elevation (feet)	Contents (million ft^3)	Change in contents (equivalent in ft^3/s)	Elevation (feet)	Contents (million ft^3)	Change in contents (equivalent in ft^3/s)
	01335900 Delta Reservoir †			01343900 Hinckley Reservoir †		
Sept. 30	550.9	2,908		1,226.4	3,504	
Oct. 31	548.6	2,636	-102	1,223.4	3,131	-139
Nov. 30	550.7	2,884	+ 95.7	1,224.9	3,308	+ 68.3
Dec. 31	549.6	2,752	- 49.3	1,221.8	2,948	-134
CAL YR 1977	-	-	+ 29.2	-	-	+ 32.1
Jan. 31	539.0	1,660	-408	1,217.3	2,480	-175
Feb. 28	522.6	594	-441	1,196.9	899	-654
Mar. 31	535.2	1,346	+281	1,193.1	682	- 81.0
Apr. 30	550.6	2,872	+589	1,218.7	2,620	+748
May 31	549.5	2,740	- 49.3	1,224.8	3,296	+252
June 30	549.7	2,764	+ 9.27	1,222.5	3,027	-104
July 31	546.3	2,383	-142	1,213.9	2,163	-323
Aug. 31	541.8	1,920	-173	1,207.4	1,622	-202
Sept. 30	542.0	1,940	+ 7.70	1,212.3	2,023	+155
WTR YR 1978	-	-	- 30.7	-	-	- 47.0

Date	Elevation (feet)	Contents (million gallons)	Change in contents (equivalent in ft^3/s)	Elevation (feet)	Contents (million gallons)	Change in contents (equivalent in ft^3/s)	Elevation (feet)	Contents (million gallons)	Change in contents (equivalent in ft^3/s)
	01363398	Ashokan Reservoir ‡ West Basin		01363399	Ashokan Reservoir ‡ East Basin		01366400	Rondout Reservoir ‡	
Sept. 30	581.79	41,460		574.05	60,008		823.97	42,054	
Oct. 31	589.13	48,551	+354	585.63	78,212	+909	834.35	48,650	+329
Nov. 30	590.27	49,704	+ 59.5	587.07	80,628	+125	838.28	51,267	+135
Dec. 31	590.05	49,471	- 11.6	587.40	81,181	+ 27.6	837.18	50,528	- 36.9
CAL YR 1977	-	-	- 0.63	-	-	+ 32.3	-	-	+ 11.3
Jan. 31	589.50	48,920	- 27.5	587.77	81,802	+ 31.0	838.38	51,335	+ 40.3
Feb. 28	589.48	48,900	- 1.10	585.40	77,826	-220	831.61	46,864	-247
Mar. 31	590.36	49,799	+ 44.9	588.03	82,238	+220	832.11	47,187	+ 16.1
Apr. 30	590.42	49,863	+ 3.30	587.08	80,645	- 82.2	833.87	48,335	+ 59.2
May 31	590.30	49,736	- 6.34	587.20	80,846	+ 10.0	839.62	52,177	+192
June 30	590.28	49,714	- 1.13	585.16	77,424	-176	837.24	50,568	- 83.0
July 31	588.33	47,755	- 97.8	582.77	73,556	-193	836.18	49,860	- 35.3
Aug. 31	583.30	42,861	-244	581.12	70,893	-133	830.50	46,150	-185
Sept. 30	577.79	37,872	-257	576.85	64,228	-344	822.95	41,430	-243
WTR YR 1978	-	-	- 15.2	-	-	+ 17.9	-	-	- 2.65

† Elevation at 2400 hours by interpolation.
‡ Elevation at 0900 hours on first day of following month.

DIVERSIONS IN HUDSON RIVER BASIN

Undetermined diversion at Solsville from Chenango River in Susquehanna River basin into Oriskany Creek in Mohawk River Basin through Oriskany Creek Feeder.

Undetermined diversion from (and occasionally into) Oswego River, tributary to Lake Ontario, through Summit level of Erie (Barge) Canal.

04252000 Diversion from Black River tributary into Lake Ontario through Black River canal into Mohawk River in Hudson River basin (see station).

01327500 Diversion from Hudson River basin to summit level of Champlain (Barge) Canal (see station).

01343899 Diversion from Hinckley Reservoir (see preceding pages) for municipal supply of Utica. Diversion began prior to 1921. Records furnished by Utica Board of Water Supply.

Diversion from Schoharie Reservoir (see preceding pages) on Schoharie Creek through Shandaken Tunnel to Esopus Creek at, 01362230 Lat 42°06'52", long 74°21'51", near Phoenicia, Ulster County. No diversion prior to 1924. Records furnished by Department of Environmental Protection, City of New York.

01359498 Diversion from Watervliet Reservoir from municipal supply of Watervliet (see station 01359519).

01363401 Diversion from Ashokan Reservoir (see preceding pages) on Esopus Creek through the Catskill Aqueduct for municipal supply of New York City. Completed in 1917. Records furnished by Department of Environmental Protection, City of New York.

01366399 Diversion from Rondout Reservoir. Total diversion from Rondout Reservoir to Delaware Aqueduct for municipal supply of City of New York. Rondout Reservoir is a collection basin for diversion from: Cannonsville Reservoir, Pepacton Reservoir, and Neversink Reservoir in the Delaware River basin and the Rondout Creek in the Hudson River basin. Diversion began April 1944 by means of temporary emergency connection to aqueduct. Records furnished by Bureau of Water Resources Development, City of New York.

01367630 Diversion from Morris Lake, tributary to Wallkill River, by Newtown Water and Sewer Authority for municipal use in New Jersey. After use the water is released into the Paulins Kill (Delaware River basin). Records available from the Delaware River Basin Commission.

DIVERSION, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

Month	01343899 Hinckley Reservoir	01362230 Schoharie Reservoir	01363401 Ashokan Reservoir	01366399 Rondout Reservoir (a)	01366399 Rondout Reservoir (b)
October.......	28.7	546	913	1,360	470
November......	27.3	92.4	681	1,310	373
December......	27.6	0	656	1,370	376
CAL YR 1977	29.5	225	825	1,360	263
January.......	27.7	0	565	1,370	402
February......	29.7	135	658	1,370	156
March.........	31.3	233	846	1,360	330
April.........	32.2	16.1	713	1,350	473
May...........	32.9	83.7	815	1,290	503
June..........	33.7	228	834	1,370	159
July..........	32.7	373	913	1,370	44.9
August........	32.8	343	913	1,330	38.1
September.....	33.6	183	913	1,360	13.9
WTR YR 1978	30.9	186	785	1,350	278

a Total diversion.
b Diversion contributed by Rondout Creek.

01376800 HACKENSACK RIVER AT WEST NYACK, NY

LOCATION.--Lat 41°05'44", long 73°57'52", Rockland County, Hydrologic Unit 02030103, on right bank 20 ft (6 m) downstream from Penn Central Transportation Co. railroad bridge at West Nyack, 1,000 ft (305 m) upstream from State Highway 59, and 1.0 mi (1.6 km) downstream from DeForest Lake.

DRAINAGE AREA.--29.4 mi^2 (76.1 km^2).

PERIOD OF RECORD.--December 1958 to current year.

GAGE.--Water-stage recorder and stop-log control. Datum of gage is 53.50 ft (16.307 m) National Geodetic Vertical Datum of 1929 (levels by Hackensack Water Co.).

REMARKS.--Records fair except those for winter periods, which are poor. Flow regulated by DeForest Lake (see Reservoirs in Hackensack River Basin). Diversion from gaging station pool for municipal supply for village of Nyack (see Reservoirs in Hackensack River Basin). Discharge given for this station represents the flow of Hackensack River downstream from this diversion.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,550 ft^3/s (43.9 m^3/s) Feb. 3, 1973, gage height, 9.38 ft (2.859 m), from floodmarks, from rating curve extended above 840 ft^3/s (23.8 m^3/s); minimum daily, 2.6 ft^3/s (0.074 m^3/s) June 12, 1965, Sept. 25, 26, 30, 1966; minimum gage height, 1.70 ft (0.518 m) Oct. 22, 1960.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 751 ft^3/s (21.3 m^3/s) Jan. 26, gage height, 8.04 ft (2.451 m); minimum, 7.4 ft^3/s (0.21 m^3/s) Sept. 29, 30; minimum gage height, 2.64 ft (0.805 m), Nov. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	57	35	253	41	29	21	69	21	40	21	21	12
2	60	21	278	38	38	19	58	20	36	19	20	12
3	56	18	111	36	42	23	53	20	33	22	22	11
4	56	17	138	34	44	27	56	18	69	37	27	12
5	54	17	37	33	42	23	54	29	49	18	17	11
6	52	17	128	33	51	22	50	25	42	20	23	11
7	45	23	106	33	74	20	48	26	34	19	75	11
8	40	241	50	44	47	18	42	23	48	19	44	11
9	89	81	37	528	42	21	36	97	46	19	19	12
10	52	17	35	276	40	22	34	103	35	19	19	11
11	43	21	34	88	37	23	35	51	27	19	18	11
12	42	17	33	62	35	30	35	34	20	18	52	11
13	41	19	33	65	34	46	33	31	21	19	20	12
14	45	19	50	169	37	124	30	73	21	17	19	9.4
15	50	18	167	95	35	269	28	289	19	22	20	12
16	44	14	146	44	32	161	27	215	19	19	20	9.9
17	46	26	78	49	31	71	22	185	17	20	18	9.9
18	44	23	52	189	31	110	23	157	17	20	15	11
19	46	14	105	100	32	65	32	159	18	20	15	22
20	57	15	81	80	29	64	103	119	17	19	17	11
21	47	20	192	70	26	108	65	64	18	19	14	9.4
22	52	29	307	60	22	179	41	42	18	19	14	9.9
23	52	46	118	55	18	160	33	37	17	19	14	11
24	51	65	52	53	17	127	31	130	18	19	14	9.9
25	51	58	181	115	20	112	29	298	19	18	14	9.4
26	52	196	71	549	22	93	22	187	21	18	13	9.9
27	52	236	45	467	22	337	25	78	21	20	13	9.9
28	51	104	42	159	21	260	26	49	18	20	13	9.9
29	51	56	40	65	---	146	22	46	20	19	12	9.4
30	51	65	43	151	---	85	25	44	22	20	12	9.9
31	50	---	42	94	---	80	---	41	---	23	11	---
TOTAL	1579	1548	3085	3875	950	2866	1187	2711	820	620	645	331.8
MEAN	50.9	51.6	99.5	125	33.9	92.5	39.6	87.5	27.3	20.0	20.8	11.1
MAX	89	241	307	549	74	337	103	298	69	37	75	22
MIN	40	14	33	33	17	18	22	18	17	17	11	9.4

CAL YR 1977 TOTAL 18448.0 MEAN 50.5 MAX 512 MIN 9.4

WTR YR 1978 TOTAL 20217.8 MEAN 55.4 MAX 549 MIN 9.4

01387450 MAHWAH RIVER NEAR SUFFERN, NY

LOCATION.--Lat 41°08'27", long 74°07'01", Rockland County, Hydrologic Unit 02030103, on left bank 13 ft (4 m) upstream from bridge on U.S. Highway 202, 2.5 mi (4.0 km) northeast of Suffern, and 4.8 mi (7.7 km) upstream from mouth.

DRAINAGE AREA.--12.3 mi^2 (31.9 km^2).

PERIOD OF RECORD.--August 1958 to current year.

GAGE.--Water-stage recorder. Datum of gage is 321.57 ft (98.015 m) National Geodetic Vertical Datum of 1929. Prior to Nov. 18, 1976, water-stage recorder at site on right bank 13 ft (4 m) downstream, at present datum.

REMARKS.--Records fair except those below 20 ft^3/s (0.57 m^3/s), which are poor. Occasional regulation from unknown source.

AVERAGE DISCHARGE.--20 years, 24.7 ft^3/s (0.700 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,840 ft^3/s (52.1 m^3/s) Nov. 8, 1977, gage height, 9.91 ft (3.021 m), from rating curve extended above 850 ft^3/s (24.1 m^3/s) on basis of contracted-opening measurements at gage heights 8.52 ft (2.597 m) and 9.91 ft (3.021 m); minimum, 0.05 ft^3/s (0.001 m^3/s) Oct. 20, 21, 1970, result of temporary pumping from gage pool.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 200 ft^3/s (5.67 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Nov. 8	1845	*1,840	52.1	*9.91	3.021	Jan. 26	1315	459	13.0	4.85	1.478
Dec. 1	0845	248	7.02	4.07	1.241	Mar. 27	0600	503	14.2	4.98	1.518
Jan. 9	0930	456	12.9	4.84	1.475	May 14	2315	763	21.6	5.62	1.713

Minimum daily discharge, 3.6 ft^3/s (0.10 m^3/s) Sept. 8; minimum gage height 1.48 ft (0.451 m), July 30, 31.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	11	147	31	39	12	58	17	34	5.8	9.1	6.4
2	26	10	95	30	35	11	50	16	27	5.6	7.6	5.6
3	21	9.5	70	27	32	11	43	16	29	6.1	12	4.8
4	17	12	59	25	29	10	40	15	48	31	28	4.4
5	14	13	54	24	27	10	40	30	29	20	14	4.2
6	11	12	56	23	26	9.8	34	29	23	13	13	4.1
7	10	35	45	23	27	9.6	34	23	24	9.5	68	3.8
8	7.8	1040	37	30	24	9.8	31	21	36	8.6	53	3.6
9	66	665	35	256	24	10	28	51	25	9.7	26	5.1
10	70	171	31	112	23	11	27	42	20	9.5	17	4.2
11	44	108	27	67	21	12	26	34	17	9.5	13	4.1
12	32	76	25	53	20	17	27	29	16	8.4	12	5.1
13	25	62	25	45	19	25	24	27	16	8.0	10	7.8
14	24	53	38	47	18	48	21	132	15	7.8	8.6	5.4
15	29	46	68	38	19	88	20	475	14	18	7.8	5.4
16	25	42	54	32	17	68	20	190	12	16	7.2	5.8
17	36	51	45	30	17	53	19	128	11	15	6.8	5.1
18	31	53	40	58	16	43	19	104	11	13	5.9	5.8
19	28	41	39	44	16	42	31	95	12	10	5.8	26
20	33	36	36	36	15	49	45	70	11	9.3	5.4	15
21	26	34	84	35	15	62	36	58	10	8.4	5.1	12
22	24	35	85	30	14	106	28	47	11	7.8	5.0	11
23	21	37	62	27	14	107	25	40	9.5	7.6	4.8	11
24	20	39	53	26	14	106	23	82	8.4	7.2	4.7	10
25	18	32	68	41	13	84	22	98	8.0	6.6	4.8	9.3
26	19	87	62	263	13	75	21	67	7.8	6.4	5.0	8.4
27	20	61	50	156	13	348	20	53	8.6	6.8	4.7	8.2
28	18	50	42	97	12	186	20	45	7.6	7.0	7.2	8.0
29	16	44	36	63	---	111	19	39	6.8	6.8	5.9	7.8
30	14	48	33	53	---	82	18	34	6.3	6.3	5.0	7.6
31	12	---	32	45	---	68	---	39	---	7.6	5.6	---
TOTAL	779.8	3013.5	1633	1857	572	1884.2	869	2146	514.0	312.3	388.2	225.0
MEAN	25.2	100	52.7	59.9	20.4	60.8	29.0	69.2	17.1	10.1	12.5	7.50
MAX	70	1040	147	263	39	348	58	475	48	31	68	26
MIN	7.8	9.5	25	23	12	9.6	18	15	6.3	5.6	4.7	3.6

CAL YR 1977 TOTAL 11605.32 MEAN 31.8 MAX 1040 MIN .78
WTR YR 1978 TOTAL 14194.00 MEAN 38.9 MAX 1040 MIN 3.6

01413500 EAST BRANCH DELAWARE RIVER AT MARGARETVILLE, NY

LOCATION.--Lat 42°08'41", long 74°39'14", Delaware County, Hydrologic Unit 02040102, on right bank at downstream side of bridge on Fair Street at intersection with Main Street at Margaretville, 0.2 mi (0.3 km) upstream from unnamed tributary, and 1.6 mi (2.6 km) downstream from Dry Brook.

DRAINAGE AREA.--163 mi^2 (422 km^2).

PERIOD OF RECORD.--February 1937 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,302.38 ft (396.965 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 9, 1937, nonrecording gage and Sept. 9, 1937 to Aug. 17, 1944, water-stage recorder, at same site at datum 1.00 ft (0.305 m) higher.

REMARKS.--Records fair except those for winter periods, which are poor.

AVERAGE DISCHARGE.--41 years, 308 ft^3/s (8.723 m^3/s), 25.66 in/yr (652 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,700 ft^3/s (445 m^3/s) Nov. 25, 1950, gage height, 13.84 ft (4.218 m), from rating curve extended above 8,700 ft^3/s (246 m^3/s); minimum, 5.0 ft^3/s (0.14 m^3/s) Aug. 5, 1964; minimum gage height, 0.89 ft (0.271 m) Sept. 30, Oct. 1, 1943, present datum.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,800 ft^3/s (79 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 1	2300	2,990	84.7	7.01	2.137	Jan. 9	0930	*9,500	269	*11.30	3.444
Oct. 17	1245	8,100	229	10.54	3.213	Jan. 26	1245	5,500	156	8.94	2.725
Nov. 8	2045	5,860	166	9.18	2.798	Mar. 27	1630	2,940	83.3	6.96	2.121
Nov. 11	0315	3,140	88.9	7.14	2.176						

Minimum discharge, 35 ft^3/s (0.99 m^3/s) Sept. 14, 15, gage height, 2.60 ft (0.792 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	867	357	1310	390	586	98	1290	273	340	81	50	134
2	1670	331	1250	350	537	96	1580	248	243	75	47	83
3	971	310	1000	330	467	94	1180	220	286	72	44	65
4	849	290	824	300	400	92	990	198	298	824	81	59
5	639	336	694	280	366	90	1190	224	252	447	72	54
6	569	302	657	280	330	90	977	243	224	294	290	50
7	477	314	552	270	300	90	1060	212	212	228	344	47
8	403	1950	467	280	290	90	977	194	462	191	422	44
9	812	2730	442	5150	270	90	843	260	413	167	220	43
10	717	1590	385	2060	250	94	746	306	340	154	170	40
11	541	2150	344	1290	220	100	770	256	290	180	139	40
12	472	1330	336	1030	200	110	1160	232	256	139	128	40
13	413	1040	340	841	190	122	1100	220	294	117	114	38
14	389	824	1070	700	180	239	1060	232	260	107	99	37
15	580	700	1780	600	170	592	843	1200	212	107	87	37
16	498	615	1170	520	160	344	688	1290	184	94	81	38
17	5910	592	918	470	150	273	569	1620	167	99	72	38
18	3560	621	758	430	140	239	493	1520	161	102	67	41
19	2160	493	651	400	130	232	457	1250	281	85	63	362
20	2040	437	563	380	130	235	592	951	177	77	59	161
21	1400	413	603	350	130	729	580	886	164	70	54	112
22	1110	403	536	340	120	1290	503	688	235	65	52	114
23	886	366	447	330	120	990	447	569	161	61	49	99
24	740	349	408	330	120	912	417	514	139	63	47	87
25	633	327	875	439	110	711	394	472	128	55	87	79
26	552	357	615	3530	110	639	380	394	117	52	70	72
27	519	319	520	2060	100	1730	366	340	117	52	57	68
28	519	302	500	1220	100	1560	349	302	107	61	52	65
29	477	281	470	910	---	1290	327	327	94	54	54	61
30	427	281	450	748	---	1060	302	290	87	50	47	57
31	385	---	420	665	---	931	---	264	---	49	125	---
TOTAL	32185	20710	21355	27273	6376	15252	22630	16195	6701	4272	3343	2265
MEAN	1038	690	689	880	228	492	754	522	223	138	108	75.5
MAX	5910	2730	1780	5150	586	1730	1580	1620	462	824	422	362
MIN	385	281	336	270	100	90	302	194	87	49	44	37
CFSM	6.37	4.23	4.23	5.40	1.40	3.02	4.63	3.20	1.37	.85	.66	.46
IN.	7.35	4.73	4.87	6.22	1.46	3.48	5.16	3.70	1.53	.97	.76	.52

CAL YR 1977 TOTAL 181708 MEAN 498 MAX 7550 MIN 16 CFSM 3.06 IN 41.47
WTR YR 1978 TOTAL 178557 MEAN 489 MAX 5910 MIN 37 CFSM 3.00 IN 40.75

01414500 MILL BROOK NEAR DUNRAVEN, NY

LOCATION.--Lat 42°06'22", long 74°43'51", Delaware County, Hydrologic Unit 02040102, on left bank 0.4 mi (0.6 km) upstream from bridge on New York City Road 9 and Pepacton Reservoir, and 2.7 mi (4.3 km) southwest of Dunraven.

DRAINAGE AREA.--25.0 mi^2 (64.7 km^2).

PERIOD OF RECORD.--February 1937 to current year. Published as "at Arena" 1937-67.

REVISED RECORDS.--WSP 1432: 1937.

GAGE.--Water-stage recorder. Datum of gage is 1,298.54 ft (395.795 m) Board of Water Supply, City of New York datum. Prior to Oct. 17, 1939, nonrecording gage at site 0.2 mi (0.3 km) downstream at different datum. Oct. 17 to Dec. 8, 1939, nonrecording gage at present site at different datum.

REMARKS.--Records fair except those for winter periods, which are poor.

AVERAGE DISCHARGE.--41 years, 56.0 ft^3/s (1.586 m^3/s), 30.42 in/yr (773 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,500 ft^3/s (127 m^3/s) Sept. 21, 1938, from rating curve extended above 960 ft^3/s (27.2 m^3/s) on basis of velocity-area study; maximum gage height, 9.92 ft (3.024 m) Nov. 25, 1950; minimum discharge observed, 1.2 ft^3/s (0.034 m^3/s) Sept. 25, 26, 1939, gage height, 0.71 ft (0.216 m), site and datum then in use.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 740 ft^3/s (21 m^3/s) and maximum (*):

Date	Time	Discharge		Gage height		Date	Time	Discharge		Gage height	
		(ft^3/s)	(m^3/s)	(ft)	(m)			(ft^3/s)	(m^3/s)	(ft)	(m)
Oct. 1	2030	868	24.6	4.11	1.253	Feb. 10	0845	ice jam		4.76	1.451
Oct. 17	0930	987	28.0	4.23	1.289	Mar. 14	2030	ice jam		*5.18	1.579
Jan. 9	0800	*1,270	36.0	4.52	1.378	July 4	0830	1,050	29.7	4.35	1.326
Jan. 26	0730	ice jam		4.69	1.430						

Minimum discharge, 5.1 ft^3/s (0.14 m^3/s) Sept. 11, 13, 14, 15, 16-18, gage height, 2.64 ft (0.805 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	166	37	253	44	80	13	155	42	37	13	8.1	25
2	217	37	235	42	70	13	189	40	35	12	7.5	12
3	170	55	190	40	60	13	172	37	36	11	11	9.9
4	127	62	127	39	52	13	147	35	37	244	15	8.9
5	86	42	97	38	45	13	197	38	36	128	9.6	8.1
6	78	57	88	38	40	13	187	36	37	60	34	7.9
7	67	55	75	45	36	13	196	35	42	47	42	7.2
8	60	148	67	60	33	13	191	35	45	39	44	6.6
9	175	206	62	572	31	14	145	46	40	35	46	6.3
10	185	180	45	327	30	14	111	55	38	34	36	5.8
11	135	241	35	170	30	15	155	49	38	34	19	7.2
12	94	195	45	110	29	16	277	47	39	32	18	6.6
13	75	156	60	90	28	20	268	46	38	31	16	5.8
14	72	104	152	80	27	45	248	44	38	40	13	5.2
15	97	80	260	72	26	100	158	71	37	41	12	5.4
16	88	72	190	66	25	60	99	77	34	35	11	5.1
17	480	70	139	60	25	50	70	124	30	33	9.7	5.1
18	247	70	97	56	24	45	61	162	30	34	9.1	5.6
19	217	62	80	54	23	45	60	167	32	20	8.7	50
20	217	57	70	52	21	46	99	119	30	17	8.0	31
21	185	57	78	50	20	115	100	128	37	14	7.3	29
22	156	57	70	50	18	139	69	82	35	13	6.9	23
23	104	55	60	50	17	123	61	62	35	12	6.6	18
24	83	55	55	70	16	97	58	60	37	13	9.4	15
25	72	55	148	150	15	70	56	54	32	10	14	13
26	62	57	100	450	15	72	54	48	27	9.6	8.4	11
27	62	55	80	235	14	236	53	43	24	9.1	7.1	11
28	55	57	72	160	14	203	50	39	20	12	6.6	9.9
29	50	57	57	130	---	173	48	37	17	9.4	6.8	9.5
30	45	57	50	110	---	161	45	37	15	8.4	5.8	9.0
31	40	---	45	90	---	130	---	37	---	8.4	30	---
TOTAL	3967	2548	3182	3600	864	2093	3779	1932	1008	1058.9	486.6	373.1
MEAN	128	84.9	103	116	30.9	67.5	126	62.3	33.6	34.2	15.7	12.4
MAX	480	241	260	572	80	236	277	167	45	244	46	50
MIN	40	37	35	38	14	13	45	35	15	8.4	5.8	5.1
CFSM	5.12	3.40	4.12	4.64	1.24	2.70	5.04	2.49	1.34	1.37	.63	.50
IN.	5.90	3.79	4.73	5.36	1.29	3.11	5.62	2.87	1.50	1.58	.72	.56

CAL YR 1977 TOTAL 26687.6 MEAN 73.1 MAX 678 MIN 2.3 CFSM 2.92 IN 39.71
WTR YR 1978 TOTAL 24891.6 MEAN 68.2 MAX 572 MIN 5.1 CFSM 2.73 IN 37.04

01415000 TREMPER KILL NEAR ANDES, NY

LOCATION.--Lat 42°07'12", long 74°49'08", Delaware County, Hydrologic Unit 02040102, on right bank 500 (152 m) upstream from bridge on County Highway 1, about 1,700 ft (518 m) upstream from Pepacton Reservoir, and 5 mi (8 km) south of Andes.

DRAINAGE AREA.--33.0 mi^2 (85.5 km^2).

PERIOD OF RECORD.--February 1937 to current year. Published as "near Shavertown" 1937-67.

GAGE.--Water-stage recorder. Concrete control since Nov. 1937. Datum of gage is 1,285.87 ft (391.933 m) National Geodetic Vertical Datum of 1929. Prior to Aug. 5, 1937, nonrecording gage at site 500 ft (152 m) downstream at different datum. Aug. 5 to Sept. 28, 1937, nonrecording gage at site 0.25 mi (0.40 km) downstream at different datum.

REMARKS.--Records poor prior to April 1978 and fair thereafter.

AVERAGE DISCHARGE.--41 years, 60.1 ft^3/s (1.702 m^3/s), 24.73 in/yr (628 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,250 ft^3/s (120 m^3/s) Sept. 21, 1938, gage height, 7.12 ft (2.170 m), from rating curve extended above 1,500 ft^3/s (42.5 m^3/s); minimum, 0.5 ft^3/s (0.014 m^3/s) Sept. 17, 21, 22, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 700 ft^3/s (20 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 1	2115	961	27.2	4.86	1.481	Jan. 9	0645	*2,580	73.1	*6.16	1.878
Oct. 17	1630	784	22.2	4.66	1.420	Jan. 26	1130	951	26.9	4.85	1.478

Minimum discharge, 3.7 ft^3/s (0.10 m^3/s) July 27, Aug. 3, gage height, 2.47 ft (0.753 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	260	50	350	45	80	14	220	35	32	10	5.4	30
2	290	43	330	40	70	14	250	33	29	9.4	4.6	19
3	240	40	230	37	60	14	200	30	31	9.2	4.5	14
4	190	35	180	35	50	14	170	28	32	56	39	13
5	140	45	120	35	45	14	190	35	30	27	16	11
6	130	35	100	35	43	14	170	38	27	19	214	10
7	110	70	90	37	40	14	190	35	26	15	167	9.0
8	92	150	80	40	38	14	180	30	90	13	169	8.1
9	150	200	66	920	35	14	150	45	62	11	99	7.7
10	140	160	50	600	32	14	120	43	52	11	71	6.6
11	120	300	45	330	30	15	100	39	45	12	54	7.4
12	100	210	56	250	28	15	150	38	40	9.2	50	7.4
13	90	190	60	180	26	18	140	39	44	8.1	40	6.3
14	92	120	150	140	25	50	130	39	37	8.0	33	5.5
15	120	100	350	110	23	120	109	66	31	22	28	6.9
16	100	96	220	100	22	70	90	63	28	11	25	7.6
17	450	90	160	90	21	45	77	83	25	14	22	6.9
18	370	100	120	80	20	40	66	111	25	11	19	8.4
19	290	90	90	70	19	35	62	115	48	8.3	17	138
20	290	80	80	60	18	35	91	101	27	7.1	17	51
21	220	70	84	58	17	70	83	102	26	6.5	13	39
22	170	70	80	56	16	150	72	82	34	6.0	12	42
23	130	62	66	56	16	200	64	69	23	5.6	11	34
24	100	52	54	90	15	180	60	69	20	6.4	11	30
25	96	40	120	120	15	150	57	65	18	4.5	17	27
26	92	60	84	380	14	130	52	52	17	4.0	13	24
27	92	45	70	280	14	220	48	45	17	4.1	10	22
28	70	34	64	200	14	270	44	41	15	13	9.6	20
29	62	28	60	150	---	250	40	44	13	6.5	9.1	19
30	52	50	54	100	---	200	37	38	11	5.2	7.9	17
31	45	---	50	90	---	190	---	34	---	4.9	48	---
TOTAL	4893	2715	3713	4814	846	2593	3412	1687	955	358.0	1256.1	647.8
MEAN	158	90.5	120	155	30.2	83.6	114	54.4	31.8	11.5	40.5	21.6
MAX	450	300	350	920	80	270	250	115	90	56	214	138
MIN	45	28	45	35	14	14	37	28	11	4.0	4.5	5.5
CFSM	4.79	2.74	3.64	4.70	.92	2.53	3.46	1.65	.96	.35	1.23	.66
IN.	5.52	3.06	4.19	5.43	.95	2.92	3.85	1.90	1.08	.40	1.42	.73

CAL YR 1977 TOTAL 30944.9 MEAN 84.8 MAX 1300 MIN 2.0 CFSM 2.57 IN 34.88
WTR YR 1978 TOTAL 27889.9 MEAN 76.4 MAX 920 MIN 4.0 CFSM 2.32 IN 31.44

01417000 EAST BRANCH DELAWARE RIVER AT DOWNSVILLE, NY

LOCATION.--Lat 42°04'30", long 74°58'36", Delaware County, Hydrologic Unit 02040102, on left bank 0.5 mi (0.8 km) downstream from Downsville Dam, at downstream end of outlet channel of Pepacton Reservoir, and 1.0 mi (1.6 km) east of Downsville.

DRAINAGE AREA.--371 mi^2 (961 km^2).

PERIOD OF RECORD.--July 1941 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,094.92 ft (333.731 m) Board of Water Supply, City of New York datum. Prior to Sept. 26, 1941, nonrecording gage, and Sept. 26, 1941, to June 27, 1955, water-stage recorder, at site 0.8 mi (1.3 km) downstream at datum 7.03 ft (2.143 m) lower.

REMARKS.--Records good except those for winter periods, which are poor. Subsequent to September 1954, entire flow from drainage area controlled by Pepacton Reservoir (see Reservoirs in Delaware River Basin). Part of flow diverted for New York City municipal supply (see Reservoirs in Delaware River Basin). Remainder of flow (except for conservation releases and spill) impounded for release during periods of low flow in the lower Delaware River basin, as directed by the Delaware River Master.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 23,900 ft^3/s (677 m^3/s) Nov. 26, 1950, gage height, 14.52 ft (4.426 m), site and datum then in use, from rating curve extended above 12,000 ft^3/s (340 m^3/s); minimum, 0.3 ft^3/s (0.008 m^3/s) Oct. 11, 1954; minimum daily, 0.6 ft^3/s (0.017 m^3/s) Oct. 10, 1954; minimum gage height, 1.39 ft (0.424 m) Jan. 17, 1964.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 9, 1903, reached a stage of about 16 ft or 5 m (at former datum).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8,170 ft^3/s (231 m^3/s) Jan. 9, gage height, 8.28 ft (2.524 m); minimum daily, 52 ft^3/s (1.473 m^3/s) Nov. 29, 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	83	59	473	125	872	64	1750	80	71	71	71	73
2	79	58	1900	73	661	63	2800	73	71	75	73	73
3	79	58	1980	59	483	63	2570	73	71	75	73	73
4	79	57	1540	58	379	63	1960	75	71	80	69	73
5	79	54	1200	58	340	63	1970	75	71	73	71	73
6	79	54	949	58	320	63	1760	75	73	73	73	71
7	79	57	680	57	290	63	1670	76	73	104	71	71
8	79	59	475	57	270	63	1650	77	73	141	71	71
9	81	112	317	5140	151	63	1430	80	69	141	71	71
10	82	979	204	5700	115	63	1170	80	71	141	96	69
11	78	2980	117	2900	153	63	984	80	75	107	119	69
12	80	2590	65	1900	160	63	1350	75	75	69	94	71
13	82	1740	58	1170	100	63	1540	73	75	71	69	73
14	83	1340	161	969	71	64	1540	75	75	73	91	73
15	82	994	2000	768	60	64	1310	77	73	69	113	75
16	83	761	2460	534	61	63	984	77	75	69	113	75
17	87	600	1860	455	58	64	699	231	71	69	116	75
18	84	531	1370	394	57	64	493	1410	71	71	119	75
19	84	401	1050	304	60	64	379	2370	73	102	116	75
20	86	291	761	304	61	65	357	2230	75	144	116	75
21	86	214	620	212	62	64	454	2080	73	141	99	75
22	85	177	580	158	62	63	402	1670	73	141	69	75
23	81	142	430	125	65	61	317	1040	75	141	69	75
24	81	82	308	80	64	62	246	673	73	141	69	75
25	84	73	493	124	63	62	194	483	71	107	71	75
26	83	84	783	3510	64	62	151	310	73	69	71	75
27	78	64	575	5000	59	63	122	185	75	71	71	75
28	78	58	382	3500	63	226	80	107	73	73	71	75
29	68	52	252	2310	---	1390	75	73	73	71	71	75
30	58	52	189	1680	---	1860	75	71	71	71	71	75
31	57	---	166	1210	---	1700	---	71	---	71	75	---
TOTAL	2467	14773	24398	38992	5224	6881	30482	14225	2182	2915	2612	2204
MEAN	79.6	492	787	1258	187	222	1016	459	72.7	94.0	84.3	73.5
MAX	87	2980	2460	5700	872	1860	2800	2370	75	144	119	75
MIN	57	52	58	57	57	61	75	71	69	69	69	69

CAL YR 1977 TOTAL 114563.3 MEAN 314 MAX 6390 MIN 6.7
WTR YR 1978 TOTAL 147355.0 MEAN 404 MAX 5700 MIN 52

01417500 EAST BRANCH DELAWARE RIVER AT HARVARD, NY

LOCATION.--Lat 42°01'28", long 75°07'10", Delaware County, Hydrologic Unit 02040102, on right bank 800 ft (244 m) downstream from Baxter Brook, and 1,100 ft (335 m) downstream from highway bridge at Harvard. Water-quality sampling site at discharge station.

DRAINAGE AREA.--457 mi² (1,184 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1934 to June 1967, November 1977 to September 1978.

GAGE.--Water-stage recorder. Datum of gage is 1,007.41 ft (307.059 m) National Geodetic Vertical Datum of 1929. Prior to Aug. 12, 1958, water-stage recorder 1,100 ft (335 m) upstream at datum 0.65 ft (0.198 m) higher.

REMARKS.--Records good except those for winter periods, which are poor. Subsequent to September 1954, entire flow from 371 mi² (961 km²) of drainage area controlled by Pepacton Reservoir (see Reservoirs in Delaware River Basin). Part of flow diverted for New York City municipal supply. Remainder of flow (except for conservation releases and spill) impounded for release during periods of low flow in the lower Delaware River Basin, as directed by the Delaware River Master.

EXTREMES.--Maximum discharge, 31,400 ft³/s (889 m³/s) Sept. 22, 1938, gage height, 16.93 ft (5.160 m) site and datum then in use, from rating curve extended above 10,000 ft³/s (283 m³/s) on basis of slope-area measurement at gage height 15.58 ft (4.749 m); minimum, 7.2 ft³/s (0.20 m³/s) Oct. 13, 1954, gage height 1.63 ft (0.497 m); minimum daily 7.6 ft³/s (0.22 m³/s) Oct. 13, 1954.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period November to September, about 9,000 ft³/s (255 m³/s) Jan. 9; maximum recorded gage height, 9.37 ft (2.856 m) Jan. 27; minimum discharge, 56 ft³/s (1.59 m³/s) Mar. 6, gage height 1.62 ft (0.494 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		165	789	220	883	80	1930	174	177	104	89	136
2		162	2440	200	711	78	2960	171	159	106	91	120
3		156	2490	180	582	78	2760	165	159	104	93	102
4		156	1920	170	476	78	2110	159	168	249	171	97
5		159	1450	160	430	78	2150	150	156	197	120	97
6		156	1210	150	400	78	1960	177	153	153	313	95
7		159	902	140	350	78	1960	168	147	136	360	93
8		371	700	130	330	78	2000	153	276	190	327	91
9		459	558	5400	300	78	1710	219	253	194	253	87
10		946	410	7200	250	78	1370	262	226	197	211	87
11		3060	289	4000	300	80	1160	262	208	204	226	89
12		3070	201	3000	250	80	1570	249	194	123	211	87
13		2170	208	2100	200	80	1790	237	194	108	150	87
14		1610	210	1100	170	100	1740	230	180	111	136	85
15		1220	2900	800	130	250	1470	237	159	111	168	95
16		952	3300	600	130	240	1130	237	147	104	165	93
17		789	2600	500	120	230	865	286	144	118	159	91
18		760	1900	450	110	210	673	1100	131	108	159	91
19		632	1500	360	110	200	568	2090	177	104	153	165
20		512	1100	320	100	210	535	2100	144	165	150	125
21		426	860	250	98	289	627	1960	147	168	147	106
22		386	720	200	94	622	592	1670	204	168	108	116
23		334	540	170	92	568	507	1150	156	171	95	108
24		280	490	150	90	582	434	853	141	180	89	104
25		234	820	200	88	481	367	705	131	168	95	99
26		280	1100	3800	86	430	320	530	128	102	95	97
27		241	760	6980	84	749	280	394	125	91	93	95
28		211	520	3920	82	865	234	296	123	104	91	93
29		187	440	2470	---	1620	197	226	116	97	93	93
30		187	350	1780	---	2030	180	197	111	91	91	93
31		---	280	1190	---	1890	---	184	---	91	156	---
TOTAL		20430	33957	48290	7046	12588	36149	16991	4934	4317	4858	3017
MEAN		681	1095	1558	252	406	1205	548	164	139	157	101
MAX		3070	3300	7200	883	2030	2960	2100	276	249	360	165
MIN		156	201	130	82	78	180	150	111	91	89	85

Note.--No gage-height record Dec. 14 to Jan. 12.

01417500 EAST BRANCH DELAWARE RIVER AT HARVARD, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: June to September 1978.

INSTRUMENTATION.--Temperature recorder since June 1978.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 24.5°C July 7.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	--	---	---	22.5	16.0	19.0	17.0	14.5	15.5	18.5	14.0	16.0
2	[illegible]	15.0	18.0	22.5	16.0	19.0	22.0	15.5	18.5	20.5	15.0	17.5
3	18.0	14.0	16.0	19.0	15.5	17.0	23.0	19.0	21.0	19.0	15.5	17.5
4	17.0	12.5	14.5	15.5	13.0	14.0	21.5	18.0	20.0	18.5	16.0	17.0
5	16.0	12.0	14.0	20.0	12.5	16.0	20.5	17.0	19.0	18.0	14.0	16.0
6	19.0	12.0	15.5	22.5	15.5	18.5	19.5	16.0	17.5	21.0	15.5	18.0
7	16.0	13.0	14.0	24.5	17.0	20.5	17.5	16.5	17.0	21.0	17.5	19.0
8	15.5	13.5	14.5	22.0	17.0	20.0	19.0	16.0	17.5	18.0	14.5	16.0
9	15.5	13.5	14.5	22.0	16.0	19.0	20.5	16.5	18.5	18.0	14.0	15.5
10	17.5	12.0	14.5	21.0	16.5	18.5	21.0	17.0	19.0	16.0	12.5	14.0
11	19.0	12.5	15.5	17.5	14.5	16.0	18.5	16.0	17.0	15.5	14.5	14.5
12	20.5	14.0	17.0	21.0	13.0	17.0	17.0	15.5	16.0	16.5	14.5	15.0
13	18.0	12.5	15.5	22.5	15.5	19.0	19.5	15.0	17.0	18.0	13.0	15.0
14	15.5	11.0	13.0	22.0	18.5	20.5	22.5	16.5	19.5	17.0.	12.5	14.5
15	17.5	10.5	14.0	22.5	18.0	20.0	22.0	17.5	20.0	14.5	13.5	14.0
16	18.0	12.0	15.0	22.0	18.5	20.5	21.0	17.5	19.5	15.0	13.0	14.0
17	16.0	14.0	14.5	20.5	18.0	19.0	22.0	17.5	20.0	15.5	12.5	14.0
18	19.5	13.0	15.5	23.5	16.5	19.5	21.0	17.0	19.0	14.5	14.0	14.5
19	20.5	16.0	18.0	24.0	17.5	21.0	21.5	15.5	18.5	14.0	13.0	13.5
20	22.5	16.0	19.0	23.5	19.0	21.0	20.5	17.0	18.5	16.0	12.5	14.0
21	20.5	16.5	18.0	22.0	16.5	19.0	21.0	14.5	17.5	18.5	14.0	16.0
22	20.0	16.0	17.5	20.5	16.5	18.5	21.5	15.0	18.0	17.5	14.0	16.0
23	20.0	15.0	17.5	21.5	16.0	18.5	22.0	16.5	19.0	16.5	12.5	14.0
24	21.0	14.5	17.5	22.5	16.5	19.0	22.0	18.0	20.0	16.0	12.5	14.0
25	21.0	15.0	18.0	19.0	16.0	17.5	20.5	16.5	18.5	16.0	13.0	14.5
26	18.0	16.0	16.5	18.0	15.5	16.5	20.5	15.5	17.5	15.0	11.0	13.0
27	22.5	15.5	18.5	21.0	17.0	19.0	22.0	16.5	19.0	14.5	11.0	12.5
28	23.0	18.0	20.5	22.0	18.5	20.5	20.0	17.5	18.5	14.5	11.5	12.5
29	24.0	17.0	20.5	21.0	17.5	19.5	22.5	17.0	19.5	14.0	9.5	11.5
30	23.5	17.5	20.5	19.5	17.5	18.5	21.0	17.5	19.5	13.5	9.5	11.5
31	---	---	---	17.0	15.0	16.0	19.5	15.0	17.0	---	---	---
MONTH	24.0	10.5	16.5	24.5	12.5	18.5	23.0	14.5	18.5	21.0	9.5	15.0

01420000 LITTLE BEAVER KILL NEAR LIVINGSTON MANOR, NY

LOCATION.--Lat 41°52'23", long 74°47'52", Sullivan County, Hydrologic Unit 02040102, on right bank 100 ft (30 m) downstream from private bridge, 0.2 mi (0.3 km) west from interchange 97 on U.S. Highway 17, 2.5 (4.0 km) southeast of Livingston Manor, and 3 mi (5 km) upstream from Cattail Brook.

DRAINAGE AREA.--19.8 mi^2 (51.3 km^2).

PERIOD OF RECORD.--July 1924 to current year.

REVISED RECORDS.--WSP 1302: 1930(M), 1933(M), 1936-37(M), 1942-46(M). WSP 1432: 1928(M).

GAGE.--Water-stage recorder. Concrete control since November 1933. Datum of gage is 1,496.69 ft (456.191 m) National Geodetic Vertical Datum of 1929. Prior to Dec. 9, 1939, nonrecording gage.

REMARKS.--Records good except those for winter periods, which are poor. Some diversion from Lily Pond for village of Liberty water supply.

AVERAGE DISCHARGE.--54 years, 45.2 ft^3/s (1.280 m^3/s), 31.00 in/yr (787 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,420 ft^3/s (96.9 m^3/s) Aug. 26, 1928, gage height, 8.7 ft (2.65 m), from floodmarks, from rating curve extended above 1,700 ft^3/s (48.1 m^3/s); minimum, 0.9 ft^3/s (0.025 m^3/s) July 10, 1962; minimum gage height, 1.23 ft (0.375 m) Aug. 1, 3, 5, 1936.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 730 ft^3/s (20.7 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 1	1945	1,470	41.6	5.35	1.631	Jan. 9	0715	*2,200	62.3	*6.30	1.920

Minimum discharge, 3.5 ft^3/s (0.10 m^3/s) Sept. 9, 14, 15, gage height, 1.41 ft (0.430 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	339	23	247	32	60	16	237	25	28	11	7.5	11
2	396	22	157	30	56	16	288	22	23	10	6.5	6.0
3	132	21	100	42	54	16	143	19	25	9.3	5.6	6.0
4	86	22	79	38	52	15	106	19	28	44	7.5	7.5
5	60	22	62	25	50	15	187	34	22	24	6.0	4.8
6	60	21	60	24	49	15	145	46	20	14	35	4.4
7	47	22	58	23	47	15	247	36	19	10	20	4.1
8	39	120	54	27	45	15	224	30	77	8.6	17	4.1
9	430	117	52	800	44	14	126	234	56	8.6	10	4.1
10	184	79	48	243	44	14	113	152	34	13	8.6	3.8
11	99	169	47	124	40	14	148	81	25	11	11	5.2
12	75	86	31	87	36	14	227	56	23	7.5	11	4.4
13	56	62	32	76	29	14	190	47	29	7.0	9.3	4.1
14	52	47	90	70	26	40	145	95	25	7.0	7.5	3.8
15	95	41	210	60	25	70	95	227	20	8.0	6.5	3.8
16	75	37	117	54	25	56	77	159	16	7.0	5.6	4.1
17	425	44	86	50	23	48	64	250	15	12	5.6	3.8
18	182	56	66	52	22	45	56	392	15	8.6	5.2	5.6
19	130	40	58	49	22	38	58	198	26	6.5	4.8	36
20	132	35	49	47	22	37	120	109	19	6.0	5.2	12
21	89	39	56	46	21	60	102	92	14	6.0	4.4	8.0
22	70	39	58	43	20	97	70	68	15	5.6	4.1	8.6
23	56	32	46	40	19	118	54	54	13	6.0	4.1	7.5
24	51	31	41	40	18	113	46	122	11	7.5	3.8	6.0
25	41	29	126	50	18	84	41	111	10	5.6	4.1	5.6
26	37	68	90	450	17	73	37	68	10	5.2	4.4	5.2
27	35	49	72	200	17	361	34	47	11	5.6	4.8	4.8
28	31	39	68	100	17	300	30	40	9.3	8.0	5.2	5.2
29	28	35	62	88	---	224	27	37	9.3	6.0	7.0	4.8
30	25	34	40	80	---	169	25	35	14	7.5	4.8	4.4
31	24	---	37	72	---	152	---	29	---	6.5	19	---
TOTAL	3581	1481	2399	3162	918	2278	3462	2934	661.6	302.6	261.1	198.7
MEAN	116	49.4	77.4	102	32.8	73.5	115	94.6	22.1	9.76	8.42	6.62
MAX	430	169	247	800	60	361	288	392	77	44	35	36
MIN	24	21	31	23	17	14	25	19	9.3	5.2	3.8	3.8
CFSM	5.86	2.50	3.91	5.15	1.66	3.71	5.81	4.78	1.12	.49	.43	.33
IN.	6.73	2.78	4.51	5.94	1.72	4.28	6.50	5.51	1.24	.57	.49	.37

CAL YR 1977 TOTAL 21680.1 MEAN 59.4 MAX 1480 MIN 4.7 CFSM 3.00 IN 40.73
WTR YR 1978 TOTAL 21639.0 MEAN 59.3 MAX 800 MIN 3.8 CFSM 3.00 IN 40.65

01420500 BEAVER KILL AT COOKS FALLS, NY

LOCATION.--Lat 41°56'47", long 74°58'48", Delaware County, Hydrologic Unit 02040102, on left bank 66 ft or 20 m (revised) downstream from road bridge in Cooks Falls, and 5.5 mi (8.8 km) downstream from Willowemoc Creek.

DRAINAGE AREA.--241 mi^2 (624 km^2).

PERIOD OF RECORD.--July 1913 to current year.

REVISED RECORDS.--WSP 521: Drainage area. WSP 781: 1933(M). WSP 891: 1936-39(M). WSP 1202: 1950. WSP 1232: 1950(M).

GAGE.--Water-stage recorder. Datum of gage is 1,151.70 ft (351.038 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1933, nonrecording gage at site 125 ft (38 m) upstream at same datum.

REMARKS.--Records fair except those for winter periods, which are poor. Slight diversion at headwaters into Cooper Lake for water supply of Kingston.

AVERAGE DISCHARGE.--64 years, 560 ft^3/s (15.86 m^3/s), 31.55 in/yr (801 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 31,600 ft^3/s (895 m^3/s) Mar. 31, 1951, gage height, 16.02 ft (4.883 m), from rating curve extended above 13,000 ft^3/s (368 m^3/s) on basis of slope-area measurement at gage height 15.52 ft (4.730 m); minimum, 16 ft^3/s (0.45 m^3/s) Nov. 22, 23, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,700 ft^3/s (130 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 2	0015	9,760	276	10.09	3.075	Jan. 9	0930	*20,300	575	*13.52	4.121
Oct. 9	1145	5,900	167	8.19	2.496	Jan. 26	1315	8,590	243	9.57	2.917
Oct. 17	1400	6,340	180	8.44	2.573						

Minimum discharge, 74 ft^3/s (2.10 m^3/s) Sept. 15, gage height, 0.95 ft (0.290 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1960	391	2100	500	640	160	2100	443	502	182	123	258
2	4670	365	2140	450	560	150	2930	408	422	174	120	160
3	2010	346	1560	410	520	140	1980	372	405	165	112	130
4	1480	337	1240	390	450	170	1530	343	466	1190	138	110
5	1100	415	1030	370	430	160	1950	432	381	807	127	100
6	981	385	976	370	410	150	1740	556	340	490	213	110
7	853	359	817	378	390	150	2170	498	337	381	250	94
8	707	827	660	381	370	140	2390	443	931	318	326	92
9	3090	1820	560	10200	350	140	1740	1140	868	286	213	92
10	2710	1130	480	3520	330	140	1520	1410	640	255	174	90
11	1640	2070	430	1960	320	140	1680	948	509	260	158	94
12	1250	1490	400	1410	300	140	2620	778	439	222	169	91
13	998	1170	380	1000	290	140	2380	711	483	200	162	83
14	878	959	884	900	280	250	2120	758	475	186	144	77
15	1280	822	2460	720	270	600	1560	1340	381	184	131	77
16	1090	744	1660	660	260	500	1240	1220	337	196	120	78
17	4320	688	1280	620	240	430	1040	1640	310	323	116	80
18	3060	782	1080	540	230	410	915	2330	301	250	111	86
19	2150	648	948	560	220	400	868	1940	337	192	105	224
20	2230	568	827	520	210	420	1180	1450	288	169	100	172
21	1640	540	858	450	210	560	1260	1350	337	160	97	123
22	1310	577	905	420	200	1240	1000	1100	564	149	93	128
23	1080	517	744	370	200	1210	863	937	359	141	89	115
24	910	494	662	350	190	1410	787	1110	301	157	89	104
25	797	468	1300	593	190	1110	720	1230	268	136	94	96
26	702	693	1370	5100	180	476	666	926	263	127	100	89
27	666	653	780	2990	180	2420	618	773	258	124	104	89
28	597	548	680	1740	170	2930	568	684	236	133	104	88
29	529	494	640	1250	---	2250	521	614	215	125	115	83
30	475	487	600	880	---	1440	475	552	198	128	114	79
31	429	---	540	760	---	1730	---	509	---	121	222	---
TOTAL	47592	21787	30991	40802	8590	22706	43131	28945	12153	7931	4333	3292
MEAN	1535	726	1000	1316	307	732	1438	934	405	256	140	110
MAX	4670	2070	2460	10200	640	2930	2930	2330	931	1190	326	258
MIN	429	337	380	350	170	140	475	343	198	121	89	77
CFSM	6.37	3.01	4.15	5.46	1.27	3.04	5.97	3.88	1.68	1.06	.58	.46
IN.	7.35	3.36	4.78	6.30	1.33	3.50	6.66	4.47	1.88	1.22	.67	.51

CAL YR 1977 TOTAL 272700 MEAN 747 MAX 14100 MIN 52 CFSM 3.10 IN 42.09
WTR YR 1978 TOTAL 272253 MEAN 746 MAX 10200 MIN 77 CFSM 3.10 IN 42.02

01421000 EAST BRANCH DELAWARE RIVER AT FISHS EDDY, NY

LOCATION.--Lat 41°58'23", long 75°10'28", Delaware County, Hydrologic Unit 02040102, on left bank 3,000 ft (914 m) upstream from bridge on County highway 28 at Fishs Eddy, 0.6 mi (1.0 km) upstream from Fish Creek, 4.2 mi (6.8 km) downstream from Beaver Kill, and 11 mi (18 km) upstream from the confluence of East and West Branches near Hancock. Water-quality sampling site at discharge station.

DRAINAGE AREA.--783 mi² (2,028 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1912 to current year. Monthly discharge only for some periods, published in WSP 1302.

REVISED RECORDS.--WSP 756: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 955.96 ft (291.377 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 27, 1928, nonrecording gage and Sept. 28, 1928 to Nov. 1, 1967, water-stage recorder at site 3,000 ft (914 m) downstream at datum 5.0 ft (1.52 m) lower.

REMARKS.--Records fair except those for winter periods, which are poor. Subsequent to September 1954, entire flow from 371 mi² (961 km²) of drainage area controlled by Pepacton Reservoir (see Reservoirs in Delaware River Basin). Part of flow diverted for New York City municipal supply. Remainder of flow (except for conservation releases and spill) impounded for release during periods of low flow in the lower Delaware River basin, as directed by the Delaware River Master.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 53,300 ft³/s (1,510 m³/s) Aug. 24, 1933, gage height, 20.60 ft (6.279 m) at former site and datum, from rating curve extended above 22,000 ft³/s (623 m³/s); minimum, 52 ft³/s (1.47 m³/s) July 23, 1964, gage height, 1.16 ft (0.354 m) at former site and datum; minimum daily, 68 ft³/s (1.93 m³/s) Aug. 29, 1949.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 9, 1903, reached a stage of 23.6 ft (7.19 m) at former site and datum, from description obtained in April 1939, from local residents who had experienced the flood (discharge, about 70,000 ft³/s or 1,980 m³/s, from rating curve extended above 22,000 ft³/s or 623 m³/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 28,400 ft³/s (804 m³/s) Jan. 9, gage height, 12.77 ft (3.892 m); minimum, 165 ft³/s (4.67 m³/s) Sept. 30; minimum gage height, 3.00 ft (0.914 m) Sept. 14, 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1980	647	2950	840	1600	330	4200	664	751	322	317	469
2	6770	603	4990	700	1300	330	6390	624	648	317	317	331
3	3460	564	4430	500	1000	320	5100	578	624	308	317	278
4	2550	546	3610	540	840	320	3980	549	681	1900	488	258
5	1910	629	2700	540	800	310	4360	608	585	1480	404	242
6	1650	612	2200	520	760	310	4050	788	542	887	632	254
7	1430	586	1800	500	700	300	4430	733	501	715	837	242
8	1190	1270	1500	500	660	300	4890	681	1180	698	867	250
9	3290	2770	1200	16300	600	300	3870	1340	1250	664	632	254
10	3890	2350	900	11500	540	300	3290	1940	963	616	521	228
11	2530	5190	700	6210	520	290	3160	1450	779	624	494	242
12	1980	4830	620	3400	560	290	4500	1210	681	514	494	228
13	1600	3710	700	2800	500	290	4500	1090	681	456	444	194
14	1400	2950	1000	2200	450	450	4160	1090	706	432	398	182
15	2130	2400	4300	1800	430	900	3360	1710	593	426	393	194
16	1960	2000	4590	1500	420	800	2720	1610	535	415	376	194
17	7040	1750	3780	1300	410	700	2230	2100	501	556	361	188
18	5840	1800	2800	1200	400	660	1900	3440	475	521	351	194
19	3930	1490	2200	1100	390	640	1680	4180	535	426	336	392
20	3980	1240	1900	1000	380	620	1920	3720	481	438	327	366
21	3030	1090	1800	800	370	800	2130	3480	469	444	322	286
22	2380	1080	1700	700	360	2320	1890	3050	817	438	286	286
23	1930	955	1400	600	350	2160	1610	2410	556	421	258	270
24	1590	667	1370	560	350	2490	1400	2190	481	450	254	250
25	1370	793	2000	580	340	2040	1220	2280	438	421	262	235
26	1200	1050	2660	8000	340	1610	1080	1780	421	351	258	214
27	1130	1010	1700	9750	340	3310	963	1390	415	322	291	194
28	1000	867	1400	5770	330	4390	867	1130	398	351	254	194
29	889	782	1200	3960	---	4180	769	941	371	336	262	182
30	782	761	1100	3100	---	4270	706	827	346	331	258	176
31	700	---	1000	2000	---	3920	---	760	---	322	404	---
TOTAL	76511	47197	66200	90870	16040	40450	87325	50343	18404	16902	12415	7467
MEAN	2468	1573	2135	2931	573	1305	2911	1624	613	545	400	249
MAX	7040	5190	4990	16300	1600	4390	6390	4180	1250	1900	867	469
MIN	700	546	620	500	330	290	706	549	346	308	254	176

CAL YR 1977 TOTAL 526110 MEAN 1441 MAX 21500 MIN 152
WTR YR 1978 TOTAL 530124 MEAN 1452 MAX 16300 MIN 176

01421000 EAST BRANCH DELAWARE RIVER AT FISHS EDDY, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1958-59, 1968 to current year.
CHEMICAL DATA: 1958-59 (d), 1970 (b), 1971-74 (d), 1975 (c).
MINOR ELEMENTS DATA: 1971-74 (a).
ORGANIC DATA: TOC--1974 (a), 1975 (c).
NUTRIENT DATA: 1971-75 (d).
BIOLOGICAL DATA:
Coliform bacteria--1971 (c), 1973-75 (c).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: November 1967 to current year.

INSTRUMENTATION.--Temperature recorder since November 1967.

REMARKS.--Temperature probe may be affected by solar radiation during periods of low flow.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum (water years 1968-75, 1978), 31.5°C Aug. 2, 1975; minimum (water years 1968-76, 1978), freezing point on many days during winter periods, except water year 1978.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 29.5°C July 21, 23; minimum, 1.0°C on many days during winter period.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	14.5	13.5	14.0	10.0	7.0	8.5	6.0	4.5	5.5	1.5	1.0	1.0
2	15.0	13.5	14.5	11.5	9.0	10.0	7.0	6.0	6.5	1.0	1.0	1.0
3	13.5	12.5	13.0	13.5	11.5	12.5	6.5	6.0	6.5	1.0	1.0	1.0
4	12.5	11.0	12.0	15.0	13.5	14.0	6.0	5.0	5.5	1.0	1.0	1.0
5	13.0	11.0	12.0	15.0	14.5	14.5	5.0	2.5	4.0	1.0	1.0	1.0
6	13.5	12.0	12.5	14.5	14.0	14.5	4.5	3.0	4.0	1.5	1.0	1.0
7	12.0	10.5	11.5	14.5	13.5	14.0	3.5	2.0	2.5	1.0	1.0	1.0
8	10.5	9.5	10.0	13.0	12.0	12.5	2.5	1.5	2.0	2.5	1.0	1.5
9	12.5	10.5	11.5	12.5	12.0	12.0	2.0	1.0	1.5	3.0	1.5	2.0
10	12.5	11.0	11.5	13.0	12.5	12.5	1.5	1.0	1.5	2.5	2.0	2.5
11	12.0	10.0	11.0	13.0	10.0	11.5	1.5	1.5	1.5	2.5	1.5	2.0
12	13.0	11.0	12.0	10.0	9.5	9.5	1.5	1.5	1.5	2.0	1.5	1.5
13	11.5	10.5	11.0	9.0	8.0	8.5	1.5	1.5	1.5	2.0	1.5	2.0
14	10.5	9.5	10.0	8.0	7.5	7.5	1.5	1.0	1.5	1.5	1.0	1.0
15	10.0	9.0	9.5	9.0	7.0	8.0	4.5	1.0	2.5	1.0	1.0	1.0
16	10.5	9.0	9.5	10.0	8.5	9.5	5.5	4.5	5.0	1.0	1.0	1.0
17	10.5	9.0	10.0	10.5	10.0	10.0	5.0	4.5	4.5	1.0	1.0	1.0
18	9.5	8.5	9.0	9.5	8.0	8.5	4.5	3.5	4.0	1.0	1.0	1.0
19	9.5	8.5	9.0	7.5	7.0	7.5	4.5	4.0	4.0	1.0	1.0	1.0
20	10.5	9.5	10.0	7.5	6.0	7.0	4.5	4.0	4.5	1.0	1.0	1.0
21	11.0	9.5	10.0	7.5	6.5	7.0	4.0	3.5	4.0	1.0	1.0	1.0
22	10.5	9.5	10.0	7.5	7.0	7.0	4.0	3.0	3.5	1.0	1.0	1.0
23	10.5	8.5	9.5	7.0	6.5	6.5	3.0	2.5	3.0	1.0	1.0	1.0
24	9.0	7.0	8.5	7.5	5.5	7.0	3.0	2.0	2.5	1.0	1.0	1.0
25	10.5	8.0	9.0	7.0	5.5	6.5	4.0	3.0	3.5	1.0	1.0	1.0
26	11.5	10.0	10.5	5.0	3.0	4.0	3.0	1.0	1.5	1.5	1.0	1.0
27	14.0	11.0	12.5	3.0	2.0	2.5	1.0	1.0	1.0	2.0	1.5	1.5
28	13.5	12.0	13.0	3.5	2.0	3.0	1.0	1.0	1.0	2.0	1.5	1.5
29	12.5	10.5	11.5	4.0	3.5	4.0	1.0	1.0	1.0	1.5	1.0	1.0
30	11.5	9.0	10.0	4.5	4.0	4.5	1.0	1.0	1.0	1.5	1.0	1.0
31	10.0	7.5	8.5	---	---	---	2.0	1.0	1.5	1.0	1.0	1.0
MONTH	15.0	7.0	11.0	15.0	2.0	9.0	7.0	1.0	3.0	3.0	1.0	1.0

01421000 EAST BRANCH DELAWARE RIVER AT FISHS EDDY, NY--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	1.0	1.0	1.0	1.0	1.0	1.0	7.0	5.0	6.0	10.0	7.5	9.0
2	1.0	1.0	1.0	1.5	1.0	1.0	6.5	4.0	5.0	13.5	7.5	10.0
3	1.0	1.0	1.0	1.0	1.0	1.0	4.5	3.0	3.5	14.5	9.0	12.0
4	1.5	1.0	1.0	1.0	1.0	1.0	5.0	3.5	4.0	14.0	9.5	12.0
5	1.5	1.0	1.0	1.0	1.0	1.0	5.0	4.5	5.0	12.0	9.5	10.5
6	1.0	1.0	1.0	1.0	1.0	1.0	7.0	4.0	5.5	9.5	9.0	9.0
7	1.0	1.0	1.0	1.0	1.0	1.0	7.0	5.5	6.0	11.5	9.0	10.0
8	1.0	1.0	1.0	1.0	1.0	1.0	6.5	4.5	5.0	13.0	9.5	11.5
9	1.0	1.0	1.0	1.5	1.0	1.0	7.5	4.0	5.5	13.5	12.0	13.0
10	1.0	1.0	1.0	1.5	1.0	1.0	8.0	4.5	6.5	13.0	11.5	12.0
11	1.0	1.0	1.0	1.5	1.0	1.0	9.0	6.5	7.5	16.0	11.0	13.5
12	1.0	1.0	1.0	1.5	1.0	1.0	9.5	6.5	8.0	15.5	13.0	14.5
13	1.0	1.0	1.0	1.5	1.0	1.5	9.0	6.5	8.0	14.5	13.0	13.5
14	1.0	1.0	1.0	1.5	1.0	1.0	8.0	6.5	7.0	14.5	13.0	13.5
15	1.0	1.0	1.0	1.5	1.0	1.0	6.5	5.5	6.0	14.0	12.5	13.0
16	1.5	1.0	1.0	1.5	1.0	1.0	8.0	5.5	6.5	13.0	12.5	12.5
17	1.0	1.0	1.0	1.5	1.0	1.5	8.5	6.0	7.5	12.5	12.0	12.0
18	1.0	1.0	1.0	2.0	1.0	1.5	10.5	6.0	8.5	12.5	11.5	12.0
19	1.0	1.0	1.0	2.5	1.5	2.0	9.5	8.0	8.5	15.5	11.5	13.0
20	1.5	1.0	1.0	4.5	1.0	2.5	8.5	8.0	8.0	15.5	12.5	14.0
21	1.5	1.0	1.0	6.0	2.0	4.0	7.5	6.5	7.0	15.0	13.0	14.0
22	1.0	1.0	1.0	5.0	3.5	4.0	11.0	6.0	8.5	15.5	11.0	13.0
23	1.0	1.0	1.0	7.0	4.0	5.5	11.5	7.0	9.5	16.0	12.0	14.0
24	1.0	1.0	1.0	6.0	4.0	5.0	12.5	8.0	10.0	15.0	13.0	14.0
25	1.0	1.0	1.0	4.5	2.5	3.5	13.5	8.5	11.0	17.5	13.0	15.0
26	1.0	1.0	1.0	3.5	2.5	3.0	13.5	9.5	11.5	19.5	15.0	17.0
27	1.0	1.0	1.0	4.5	3.0	3.5	14.0	10.5	12.0	21.0	16.0	18.5
28	1.0	1.0	1.0	5.5	3.5	4.0	14.5	10.0	12.0	22.0	18.0	20.0
29	---	---	---	5.5	4.5	5.0	13.5	10.0	12.0	22.5	19.0	20.5
30	---	---	---	6.0	3.5	4.5	13.5	9.5	11.0	24.5	19.0	21.5
31	---	---	---	6.5	3.5	5.0	---	---	---	23.0	20.0	21.5
MONTH	1.5	1.0	1.0	7.0	1.0	2.5	14.5	3.0	7.5	24.5	7.5	14.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	22.5	19.0	20.5	25.5	20.0	23.0	24.0	18.0	20.0	23.0	19.0	20.5
2	24.0	19.0	21.5	25.5	18.0	22.0	28.5	19.5	23.5	25.0	18.5	21.5
3	22.0	18.0	20.0	21.0	18.0	20.0	28.5	22.0	24.5	24.5	18.0	21.0
4	20.5	15.5	18.0	18.0	15.0	16.0	26.5	23.5	25.0	25.0	18.5	20.5
5	19.0	15.5	17.0	20.0	14.5	17.0	25.0	21.5	23.0	24.5	16.5	20.0
6	21.5	15.0	18.0	23.5	17.5	20.5	24.5	21.5	23.0	27.0	18.5	22.0
7	19.5	17.0	17.5	25.5	19.5	22.0	22.5	20.5	21.5	26.5	20.0	22.5
8	18.5	17.0	17.5	25.5	21.5	23.5	24.0	21.0	22.5	20.5	16.5	18.0
9	19.0	17.0	17.5	26.5	22.0	24.5	25.0	21.0	23.0	23.0	16.0	18.5
10	21.0	15.5	18.0	26.0	22.5	24.0	26.0	22.0	24.0	21.0	13.0	16.5
11	22.5	16.5	19.5	22.5	19.5	21.0	23.5	21.0	22.0	20.5	17.0	18.5
12	23.5	18.0	21.0	24.5	18.0	21.0	22.0	21.0	21.5	22.5	16.5	19.0
13	21.5	16.0	19.5	25.5	19.0	22.0	26.0	20.0	22.5	24.0	14.0	18.0
14	18.5	14.0	16.0	25.5	21.5	23.5	28.0	21.5	24.5	22.0	12.5	16.5
15	20.0	13.5	17.0	27.0	21.5	24.0	28.5	23.5	26.0	19.5	14.5	16.5
16	21.0	15.0	18.0	26.5	22.5	24.5	28.5	24.5	26.0	20.0	16.0	17.5
17	19.0	16.5	17.5	24.0	21.5	22.5	29.0	24.0	26.0	22.0	14.0	17.5
18	21.5	16.0	18.5	26.5	20.5	23.5	28.0	22.5	24.5	19.0	17.0	18.0
19	24.5	19.5	21.5	28.0	21.5	24.5	28.5	21.0	24.5	17.5	16.5	17.0
20	25.5	20.0	22.5	28.5	23.0	25.5	27.0	21.5	24.0	20.0	16.0	17.5
21	24.0	20.5	22.5	29.5	24.0	26.5	27.5	19.0	22.5	24.0	17.5	20.5
22	22.0	20.0	20.5	29.0	24.5	26.5	29.0	19.0	23.0	21.0	16.0	19.5
23	23.0	15.5	20.5	29.5	24.5	26.5	29.0	18.5	23.0	22.0	14.5	17.5
24	24.0	18.5	21.0	28.5	23.5	26.0	29.0	21.0	24.0	21.5	14.0	17.0
25	24.5	19.0	21.5	26.5	22.0	24.0	23.5	19.5	22.0	20.5	14.5	17.0
26	22.0	16.0	20.0	26.0	20.5	22.5	26.5	18.5	22.0	20.5	11.5	15.0
27	25.0	19.0	21.5	28.0	21.5	24.0	28.5	18.5	22.5	20.5	11.0	15.0
28	26.0	22.5	24.0	27.5	22.0	24.0	23.5	21.5	22.5	19.0	12.5	15.0
29	26.5	21.0	24.0	24.5	20.0	22.0	28.5	21.0	24.0	20.0	10.0	14.0
30	26.5	21.5	24.0	24.5	20.0	22.0	28.0	20.5	23.0	18.5	10.0	13.5
31	---	---	---	20.0	18.0	19.0	22.5	19.5	21.0	---	---	---
MONTH	26.5	13.5	20.0	29.5	14.5	23.0	29.0	18.0	23.5	27.0	10.0	18.0

DELAWARE RIVER BASIN

01423000 WEST BRANCH DELAWARE RIVER AT WALTON, NY

LOCATION.--Lat 42°09'58", long 75°08'26", Delaware County, Hydrologic Unit 02040101, on left bank at west end of fairgrounds at Walton, and 100 ft (30 m) downstream from West Brook.

DRAINAGE AREA.--331 mi² (856 km²).

PERIOD OF RECORD.--October 1950 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,190.30 ft (362.803 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair.

AVERAGE DISCHARGE.--28 years, 593 ft³/s (16.79 m³/s), 24.33 in/yr (618 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,400 ft³/s (493 m³/s) Mar. 14, 1977, gage height, 14.16 ft (4.316 m); minimum, 12 ft³/s (0.34 m³/s) Sept. 15, Nov. 22, 1964; minimum gage height, 1.86 ft (0.567 m) Nov. 22, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,600 ft³/s (130 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 2	0330	4,790	136	8.64	2.633	Jan. 26	1700	12,600	357	12.46	3.798
Oct. 17	2145	13,700	388	12.90	3.932	Mar. 22	0415	5,060	143	8.82	2.688
Dec. 1	1915	5,000	142	8.78	2.676	Mar. 27	2030	5,720	162	9.23	2.813
Dec. 15	1045	5,280	150	8.96	2.731	Aug. 6	1430	5,080	144	8.83	2.691
Jan. 9	1315	*15,400	436	*13.51	4.118						

Minimum discharge, 68 ft³/s (1.93 m³/s) July 27, Aug. 3, gage height, 2.65 ft (0.808 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1630	446	3590	500	700	180	2280	320	298	110	81	298
2	3500	409	3420	460	600	170	3170	308	256	103	77	175
3	1990	381	2230	400	500	160	2110	286	260	99	75	134
4	1800	360	1680	390	450	160	1700	262	287	202	183	116
5	1310	360	1310	390	430	150	2150	278	248	240	203	107
6	1260	357	1230	380	420	140	1640	352	237	149	2460	100
7	1070	364	1000	370	400	140	1820	329	215	120	1660	94
8	866	790	820	395	390	140	1710	292	589	106	1170	88
9	1600	1690	740	10600	370	140	1400	331	529	98	755	84
10	1610	1200	640	4410	360	140	1190	320	450	95	573	80
11	1210	3260	540	2270	350	150	1130	295	366	183	457	78
12	1080	2000	500	1630	350	160	1410	280	324	134	400	78
13	920	1560	589	1320	350	170	1290	272	334	106	353	83
14	872	1250	1210	1110	340	350	1200	272	329	97	301	73
15	1650	1050	4470	860	330	1500	1040	439	274	163	262	71
16	1340	964	2510	700	320	820	880	456	239	121	231	73
17	8860	933	1840	640	300	591	730	652	213	271	204	76
18	8160	1190	1440	580	290	498	630	697	216	182	183	80
19	4360	890	1220	520	280	481	564	822	388	138	165	791
20	4530	774	1030	500	270	479	747	681	270	113	151	433
21	2780	741	1070	480	250	1430	780	668	231	101	138	275
22	2040	768	1060	470	240	3540	642	586	300	94	126	272
23	1560	667	832	460	230	2250	552	507	231	89	117	239
24	1250	642	736	450	220	2120	515	482	194	84	111	204
25	1050	598	1320	1500	210	1450	478	487	174	77	134	183
26	908	672	1000	8950	200	1380	450	405	160	73	154	165
27	830	617	740	4880	190	3790	420	352	157	74	130	151
28	714	580	640	2190	180	3710	391	322	154	102	114	141
29	617	541	580	1460	---	2600	366	304	136	101	107	132
30	546	558	560	1100	---	2020	344	291	121	86	99	124
31	488	---	540	907	---	1770	---	264	---	80	205	---
TOTAL	62401	26612	41087	51272	9520	32779	33729	12612	8180	3791	11379	4998
MEAN	2013	887	1325	1654	340	1057	1124	407	273	122	367	167
MAX	8860	3260	4470	10600	700	3790	3170	822	589	271	2460	791
MIN	488	357	500	370	180	140	344	262	121	73	75	71
CFSM	6.08	2.68	4.00	5.00	1.03	3.19	3.40	1.23	.83	.37	1.11	.51
IN.	7.01	2.99	4.62	5.76	1.07	3.68	3.79	1.42	.92	.43	1.28	.56

CAL YR 1977 TOTAL 343959 MEAN 942 MAX 14700 MIN 57 CFSM 2.85 IN 38.66
WTR YR 1978 TOTAL 298360 MEAN 817 MAX 10600 MIN 71 CFSM 2.47 IN 33.53

01425000 WEST BRANCH DELAWARE RIVER AT STILESVILLE, NY

LOCATION.--Lat 42°04'29", long 75°23'47", Delaware County, Hydrologic Unit 02040101, on right bank at Stilesville, 0.5 mi (0.8 km) upstream from Cold Spring Creek, 1.4 mi (2.3 km) downstream from Cannonsville Dam, and 2.0 mi (3.2 km) northeast of Deposit. Water-quality sampling site at discharge station.

DRAINAGE AREA.--456 mi² (1,181 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1952 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 992.23 ft (302.432 m) National Geodetic Vertical Datum of 1929 (levels by Board of Water Supply, City of New York). Prior to Oct. 1, 1964, at site 600 ft (183 m) downstream at datum 1.37 ft (0.418 m) higher.

REMARKS.--Records fair above 100 ft³/s (2.83 m³/s), poor below. Subsequent to October 1963, entire flow from 454 mi² (1,176 km²) of drainage area controlled by Cannonsville Reservoir (see Reservoirs in Delaware River Basin). Part of flow diverted for New York City municipal supply (see Reservoirs in Delaware River Basin). Remainder of flow (except for conservation releases and spill) impounded for release during period of low flow in the lower Delaware River basin, as directed by the Delaware River Master.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,500 ft³/s (496 m³/s) Jan. 22, 1959, gage height, 9.01 ft (2.746 m), site and datum then in use; minimum daily 7.2 ft³/s (0.20 m³/s) Feb. 8, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 7,000 ft³/s (198 m³/s) Jan. 10, gage height, 10.83 ft (3.301 m); minimum daily, 46 ft³/s (1.30 m³/s) Sept. 20; minimum gage height, 4.19 ft (1.277 m) Mar. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52	457	1470	900	1510	250	2810	493	423	568	623	449
2	55	423	3120	820	1250	240	3510	286	405	359	710	611
3	52	366	3270	720	1090	230	3480	157	408	577	504	724
4	51	325	2880	661	932	220	2990	94	381	371	829	532
5	50	310	2450	613	787	220	2870	54	365	318	515	632
6	51	297	2150	603	700	222	2750	51	336	315	311	734
7	50	291	1820	542	660	214	2630	52	348	374	306	704
8	49	448	1540	549	600	212	2660	51	472	417	306	1020
9	54	941	1320	3140	580	253	2490	53	591	326	309	1070
10	53	1330	1150	6400	540	316	2220	51	626	315	309	736
11	52	2540	1010	4600	533	158	1980	51	594	314	310	569
12	51	3100	880	3290	507	168	2010	50	542	314	527	599
13	51	2760	830	2560	486	170	2050	51	679	329	427	626
14	52	2340	936	2130	460	210	1990	51	530	750	460	867
15	66	1960	2310	1730	430	500	1840	51	418	732	310	1060
16	62	1660	3220	1390	411	950	1630	54	347	321	311	1000
17	325	1470	2960	1190	387	980	1410	132	320	353	423	702
18	4390	1460	2540	1100	372	926	1230	330	320	316	645	441
19	5200	1380	2210	980	340	820	1090	543	320	592	724	64
20	5130	1240	1850	910	320	760	1070	673	320	605	608	46
21	4270	1160	1670	820	300	820	1160	714	320	825	885	155
22	3220	1090	1640	736	280	2280	1120	770	319	847	1010	313
23	2440	1030	1480	675	270	2720	1030	793	319	609	852	234
24	1880	968	1300	644	260	2980	964	755	319	602	913	215
25	1520	920	1270	603	263	2650	873	748	320	641	1080	580
26	1250	954	1560	2240	274	2330	805	693	334	783	1060	944
27	1110	933	1430	6180	286	2800	737	623	320	848	864	959
28	924	887	1210	4740	256	4290	678	566	320	904	838	1040
29	782	833	1060	3340	---	4060	619	518	319	983	612	1050
30	652	789	971	2450	---	3470	562	473	541	981	299	1010
31	543	---	959	1900	---	2990	---	436	---	390	192	---
TOTAL	34487	34662	54466	59196	15084	39409	53258	10417	12176	16979	18072	19686
MEAN	1112	1155	1757	1910	539	1271	1775	336	406	548	583	656
MAX	5200	3100	3270	6400	1510	4290	3510	793	679	983	1080	1070
MIN	49	291	830	549	256	158	562	50	319	314	192	46

CAL YR 1977 TOTAL 363264 MEAN 995 MAX 11400 MIN 12
WTR YR 1978 TOTAL 367892 MEAN 1008 MAX 6400 MIN 46

01425000 WEST BRANCH DELAWARE RIVER AT STILESVILLE, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1963 to current year.
CHEMICAL DATA: 1959-60 (a) unpublished, 1969 (a), 1970 (a) unpublished, 1971 (b), 1973 (b), 1974 (d), 1975 (b).
MINOR ELEMENTS DATA: 1971 (b).
NUTRIENT DATA: 1970 (a) unpublished, 1971 (b), 1973 (b), 1974 (d), 1975 (b).
BIOLOGICAL DATA:
Coliform bacteria--1973 (b), 1974 (d), 1975 (b).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1962 to current year.

INSTRUMENTATION.--Temperature recorder since October 1962.

REMARKS.--Water temperature is affected by release of water from upstream reservoir; and at low flow, temperature probe may be affected by solar radiation.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 30.5°C July 2, 1963; minimum, freezing point on many days during winter periods, except 1969 and 1973.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 21.5°C May 30; minimum, freezing point on many days during winter period.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	12.5	10.5	11.5	12.0	10.5	11.0	7.5	7.0	7.5	2.0	1.5	2.0
2	12.0	10.5	11.0	12.0	11.0	11.5	7.5	7.0	7.5	3.0	1.5	2.5
3	10.5	9.5	10.0	12.5	11.5	12.0	7.0	7.0	7.0	3.0	1.5	2.5
4	12.5	8.0	10.0	12.5	12.0	12.5	7.0	6.5	7.0	3.0	2.0	2.5
5	13.5	9.0	11.0	13.0	12.0	12.5	6.5	6.0	6.5	2.5	2.5	2.5
6	13.5	10.0	11.0	12.5	12.0	12.0	6.5	6.0	6.5	3.0	2.0	2.5
7	11.5	8.5	10.0	12.5	12.0	12.0	6.0	5.5	6.0	2.0	2.0	2.0
8	9.0	8.0	8.5	12.0	11.5	12.0	6.0	5.5	5.5	3.0	2.0	2.0
9	12.0	9.5	10.5	12.0	11.5	12.0	6.0	5.0	5.5	3.0	2.5	3.0
10	11.5	9.0	10.0	12.0	11.5	11.5	5.0	4.5	5.0	3.0	2.5	3.0
11	14.5	8.5	10.5	11.0	10.0	10.5	5.0	4.5	4.5	2.5	2.0	2.5
12	13.0	10.0	11.0	10.5	10.0	10.0	4.5	4.0	4.5	2.5	2.5	2.5
13	11.5	8.5	10.0	10.0	9.5	10.0	5.0	4.5	4.5	2.5	2.0	2.0
14	9.5	8.5	9.0	9.5	9.5	9.5	5.0	5.0	5.0	1.5	1.5	1.5
15	11.0	8.0	9.0	10.0	9.5	9.5	5.0	5.0	5.0	2.5	1.5	2.0
16	10.0	8.5	9.0	10.0	9.5	9.5	5.0	5.0	5.0	2.5	1.5	2.0
17	12.0	6.5	8.5	10.0	9.0	9.5	5.0	4.5	4.5	2.0	1.0	1.5
18	12.5	12.0	12.5	9.0	8.5	9.0	4.5	4.5	4.5	1.5	1.0	1.0
19	12.5	12.5	12.5	9.0	8.5	8.5	4.5	4.5	4.5	1.5	1.0	1.0
20	12.5	12.0	12.0	9.0	8.5	8.5	4.5	4.5	4.5	1.0	.5	1.0
21	12.0	12.0	12.0	9.0	8.5	8.5	4.5	4.0	4.5	1.0	.5	.5
22	12.0	11.5	12.0	8.5	8.5	8.5	4.0	4.0	4.0	1.0	.5	.5
23	11.5	11.0	11.5	8.5	8.5	8.5	4.0	4.0	4.0	1.0	.0	.5
24	12.0	11.0	11.5	8.5	8.0	8.5	4.0	3.5	4.0	.5	.0	.5
25	12.0	11.0	11.5	8.5	7.5	8.0	4.0	3.5	4.0	1.0	.5	.5
26	12.0	11.0	11.5	8.0	7.0	7.5	3.5	3.0	3.5	1.5	1.0	1.5
27	12.5	11.5	12.0	7.5	6.5	7.0	3.5	3.0	3.5	1.5	1.5	1.5
28	12.0	11.5	11.5	7.5	7.0	7.5	3.5	3.0	3.0	1.5	1.5	1.5
29	12.0	11.0	11.5	7.5	7.0	7.0	3.5	3.0	3.0	1.5	1.0	1.0
30	12.0	11.0	11.5	7.0	7.0	7.0	3.0	2.5	3.0	1.0	1.0	1.0
31	12.0	10.5	11.0	---	---	---	3.0	1.5	2.5	1.0	.5	1.0
MONTH	14.5	6.5	11.0	13.0	6.5	9.5	7.5	1.5	5.0	3.0	.0	1.5

01425000 WEST BRANCH DELAWARE RIVER AT STILESVILLE, NY--Continued

TEMPERATURE (DEG. C) OF WATER, OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	1.0	.5	.5	.5	.0	.0	2.5	2.0	2.0	5.5	4.0	4.5
2	1.0	.5	.5	.5	.0	.0	2.5	2.0	2.0	8.0	4.0	5.5
3	1.0	.0	.5	.0	.0	.0	2.5	2.0	2.0	10.0	4.5	6.5
4	.5	.0	.5	.0	.0	.0	2.5	2.0	2.0	9.5	4.5	7.0
5	.5	.0	.0	.0	.0	.0	2.5	2.0	2.5	7.5	6.0	6.5
6	.0	.0	.0	.5	.0	.0	2.5	2.0	2.5	7.0	5.5	6.0
7	.5	.0	.0	.5	.0	.0	3.0	2.5	2.5	9.5	6.0	7.5
8	1.0	.0	.5	.5	.0	.0	2.5	2.5	2.5	11.5	6.0	8.5
9	.5	.0	.0	1.0	.0	.5	3.5	2.5	2.5	11.5	7.0	9.0
10	.0	.0	.0	2.5	1.0	1.5	3.5	2.5	3.0	9.0	6.5	8.0
11	.0	.0	.0	2.0	.0	1.0	3.5	3.0	3.0	15.5	6.5	10.0
12	.5	.0	.0	2.0	1.0	1.5	4.0	3.0	3.5	13.5	7.0	9.5
13	.5	.0	.5	2.5	.5	1.5	4.0	3.0	3.5	9.5	8.0	9.0
14	.5	.0	.0	1.0	.0	.5	3.5	3.5	3.5	10.5	8.0	9.5
15	.5	.0	.0	1.0	.5	.5	3.5	3.0	3.5	10.0	7.5	8.5
16	.0	.0	.0	1.0	.5	.5	4.0	3.0	3.5	9.0	7.5	8.5
17	.5	.0	.0	1.5	.5	1.0	4.0	3.5	3.5	9.5	8.0	9.0
18	.5	.0	.0	1.0	.5	.5	5.0	3.0	4.0	11.0	9.0	9.5
19	.5	.0	.0	1.5	.5	1.0	4.0	3.5	4.0	11.5	8.5	10.0
20	.5	.0	.0	2.0	.5	1.0	4.0	3.5	4.0	12.5	9.0	10.0
21	.0	.0	.0	2.5	1.0	1.5	4.0	3.5	3.5	10.5	8.0	9.0
22	.0	.0	.0	1.5	1.0	1.5	5.0	3.5	4.0	11.5	9.0	10.0
23	.5	.0	.0	2.0	1.5	1.5	5.0	3.5	4.0	13.5	10.0	11.0
24	.0	.0	.0	2.0	1.5	1.5	5.5	3.5	4.0	13.0	10.5	12.0
25	.0	.0	.0	1.5	1.5	1.5	6.0	4.0	5.0	15.0	12.0	13.0
26	.5	.0	.0	1.5	1.5	1.5	6.5	4.5	5.5	17.0	13.5	15.0
27	1.0	.0	.0	2.0	1.5	1.5	7.5	5.5	6.0	17.5	15.0	16.5
28	.0	.0	.0	2.0	1.5	2.0	7.5	5.5	6.5	18.5	15.0	16.5
29	---	---	---	2.0	1.5	2.0	7.0	4.5	5.5	19.0	16.0	17.0
30	---	---	---	2.0	1.5	2.0	7.0	4.5	5.5	21.5	15.5	18.0
31	---	---	---	2.5	1.5	2.0	---	---	---	20.0	17.0	18.0
MONTH	1.0	.0	.0	2.5	.0	1.0	7.5	2.0	3.5	21.5	4.0	10.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	18.5	14.5	16.5	9.5	6.0	7.0	8.0	7.0	7.5	9.5	7.5	8.0
2	20.5	15.5	17.5	9.5	6.0	7.5	9.0	7.0	8.0	9.5	7.5	8.5
3	18.0	15.0	17.0	7.0	5.5	7.0	10.0	7.5	8.0	9.0	7.5	8.0
4	19.0	16.5	17.5	7.5	5.5	7.0	8.5	7.0	7.5	9.5	8.0	8.5
5	18.0	15.0	16.5	9.5	6.0	7.5	10.0	7.0	8.0	9.5	7.5	8.0
6	18.0	14.0	16.0	9.5	6.5	7.5	9.0	7.5	7.5	9.5	8.0	8.5
7	16.0	14.5	15.5	10.0	5.5	7.5	8.5	7.0	7.5	9.5	8.0	8.5
8	16.5	13.5	15.5	9.0	6.5	7.5	10.0	7.5	8.0	9.0	8.0	8.5
9	17.0	15.5	16.5	9.5	6.5	7.5	9.5	7.0	8.0	9.0	8.0	8.5
10	18.0	15.5	16.5	9.5	5.5	7.5	9.5	7.0	8.0	9.0	7.5	8.5
11	19.0	15.5	17.0	8.5	6.5	7.0	10.0	7.0	8.0	10.0	8.0	8.5
12	20.0	15.0	17.0	9.5	6.0	7.5	8.5	7.0	8.0	9.0	8.0	8.5
13	16.5	11.0	12.5	10.5	6.5	8.0	9.0	7.0	8.0	9.5	8.0	8.5
14	11.0	8.0	10.0	8.0	7.0	7.5	9.5	7.5	8.0	9.5	8.0	8.5
15	10.0	7.0	8.5	8.5	6.5	7.5	9.5	7.0	8.0	9.0	8.5	8.5
16	10.0	6.5	8.0	8.5	6.5	7.5	10.0	7.5	8.5	9.0	8.5	8.5
17	7.5	6.5	7.0	8.0	5.5	7.0	9.5	7.0	8.0	9.0	8.5	8.5
18	9.0	6.5	7.5	9.5	6.5	7.5	9.0	7.5	8.0	9.5	8.5	9.0
19	8.5	6.0	7.0	9.0	6.5	7.5	9.5	7.5	8.0	10.0	9.5	10.0
20	9.5	6.0	7.5	9.0	7.0	7.5	9.0	7.5	8.0	12.5	9.5	10.5
21	9.0	6.0	7.5	8.5	7.0	7.5	9.0	7.0	8.0	11.5	9.5	10.0
22	9.0	6.5	7.5	8.0	7.0	7.5	9.0	7.5	8.0	9.5	9.0	9.0
23	8.5	6.0	7.0	9.0	7.0	7.5	9.0	7.5	8.0	9.5	8.5	9.0
24	9.5	6.0	7.5	9.0	7.0	8.0	8.5	8.0	8.0	9.5	8.5	9.0
25	9.0	6.0	7.5	9.0	6.5	7.5	8.0	7.5	8.0	9.0	8.5	8.5
26	7.5	6.0	7.0	8.5	5.5	7.5	8.5	7.5	8.0	10.0	8.5	9.0
27	9.5	6.5	7.5	9.0	7.0	7.5	9.5	7.5	8.5	10.0	8.5	9.0
28	8.5	6.5	7.5	8.0	7.0	7.5	8.5	8.0	8.0	10.0	9.0	9.0
29	9.5	6.5	7.5	8.0	7.0	7.5	9.5	8.0	8.5	10.0	9.0	9.0
30	9.0	6.5	7.5	8.0	7.0	7.5	9.5	7.5	8.5	10.5	9.0	9.5
31	---	---	---	7.5	5.5	7.0	9.5	7.5	8.5	---	---	---
MONTH	20.5	6.0	11.5	10.5	5.0	7.5	10.0	7.0	8.0	12.5	7.5	9.0

01425675 OQUAGA CREEK NEAR NORTH SANFORD, NY

LOCATION.--Lat 42°10'28", long 75°26'25", Broome County, Hydrologic Unit 02040101, on left bank 20 ft (6 m) downstream from culvert on North Sanford Road, 0.2 mi (0.3 km) upstream from outlet of Stilson Pond, 1.5 mi (2.4 km) north of North Sanford, and 4.1 mi (6.6 km) upstream from Dry Brook. Water-quality sampling site at discharge station.

DRAINAGE AREA.--4.71 mi^2 (12.2 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1969 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 1,480 ft (451 m), from topographic map.

REMARKS.--Records fair. Some regulation at low flow by dam above station.

AVERAGE DISCHARGE.--9 years, 9.45 ft^3/s (0.268 m^3/s), 27.25 in/yr (692 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 238 ft^3/s (6.74 m^3/s) Oct. 9, 1976, gage height, 2.59 ft (0.789 m); maximum gage height, 2.71 ft (0.826 m) Feb. 14, 1971 (backwater from ice); minimum discharge, 0.08 ft^3/s (0.002 m^3/s) Oct. 2, 1969.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 120 ft^3/s (3.4 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 17	1030	*192	5.44	*2.34	0.713	Jan. 26	1345	182	5.15	2.28	0.695
Jan. 9	0900	144	4.08	2.05	.625						

Minimum discharge, 0.52 ft^3/s (0.015 m^3/s) Sept. 26-30; minimum gage height, 0.38 ft (0.116 m) Sept. 13, 14, 15, 16, 17, 18, 20, 21, 22-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	6.3	38	7.4	11	2.5	38	6.0	3.2	11	1.2	.70
2	36	5.7	41	7.4	9.4	2.5	43	5.6	2.9	7.4	1.2	.64
3	23	5.4	27	6.7	8.2	2.5	30	5.1	2.9	7.4	1.4	.64
4	18	5.1	19	6.3	7.0	2.5	26	4.6	2.7	7.4	1.3	.64
5	14	5.1	16	6.0	6.7	2.3	34	4.8	2.5	4.5	1.2	.64
6	15	5.1	16	5.4	6.7	2.1	31	5.6	2.3	2.1	3.6	.64
7	14	5.4	13	5.4	6.7	2.1	44	6.0	2.4	1.2	2.1	.64
8	11	25	11	5.1	6.3	2.1	41	5.7	3.9	1.0	6.7	.64
9	32	28	10	82	5.7	2.1	29	7.2	5.1	1.0	14	.64
10	33	24	9.8	40	5.4	2.1	22	7.8	5.3	1.0	13	.64
11	20	72	9.8	26	5.1	2.0	24	7.8	4.8	1.0	13	.64
12	17	34	9.8	18	4.8	2.1	34	7.7	4.3	1.0	13	.64
13	14	23	9.8	14	4.5	2.1	29	7.3	5.4	1.0	13	.64
14	13	17	13	13	4.2	3.0	23	7.0	5.7	1.0	4.2	.56
15	62	14	41	11	4.5	7.2	17	7.0	5.4	1.0	.85	.64
16	42	12	29	9.4	3.9	11	15	7.2	5.1	1.0	.77	.58
17	139	12	20	8.6	3.9	12	13	8.1	4.8	1.0	.77	.58
18	67	13	17	9.0	3.6	11	11	10	4.8	1.0	.77	.70
19	54	11	15	7.4	3.4	10	10	10	13	1.0	.77	.85
20	57	9.8	13	7.0	3.1	9.8	13	9.0	14	.94	.77	.64
21	34	9.4	14	7.0	3.1	11	17	8.4	13	.94	.77	.64
22	23	10	14	6.7	3.1	43	15	7.7	13	.94	.77	.64
23	17	9.4	13	6.3	2.9	36	12	7.2	21	.94	.77	.58
24	14	8.6	11	6.0	2.9	42	11	7.0	29	.94	.77	.58
25	12	8.2	17	7.0	2.9	28	9.7	6.6	28	.94	.77	.58
26	11	9.8	17	99	2.7	22	8.8	6.1	28	.94	.70	.52
27	10	8.6	13	64	2.5	60	8.1	5.5	27	.94	.64	.52
28	9.0	7.8	11	32	2.5	64	7.6	5.0	26	.94	.64	.52
29	7.8	7.4	9.6	19	---	43	7.1	4.5	25	1.0	.64	.52
30	7.4	7.4	9.0	15	---	30	6.6	3.9	19	1.1	.64	.52
31	6.7	---	7.8	13	---	30	---	3.5	---	1.2	.85	---
TOTAL	852.9	419.5	514.8	570.1	136.7	502.0	629.9	204.9	329.5	64.76	101.56	18.57
MEAN	27.5	14.0	16.6	18.4	4.88	16.2	21.0	6.61	11.0	2.09	3.28	.62
MAX	139	72	41	99	11	64	44	10	29	11	14	.85
MIN	6.7	5.1	7.8	5.1	2.5	2.0	6.6	3.5	2.3	.94	.64	.52
CFSM	5.84	2.97	3.52	3.91	1.04	3.44	4.46	1.40	2.34	.44	.70	.13
IN.	6.73	3.31	4.07	4.50	1.08	3.96	4.97	1.62	2.60	.51	.80	.15

CAL YR 1977 TOTAL 4278.94 MEAN 11.7 MAX 139 MIN .64 CFSM 2.48 IN 33.79
WTR YR 1978 TOTAL 4345.19 MEAN 11.9 MAX 139 MIN .52 CFSM 2.53 IN 34.31

01425675 OQUAGA CREEK NEAR NORTH SANFORD, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1971 to current year.
CHEMICAL DATA: 1971 (c), 1972 (a), 1973-74 (c), 1975 (d), 1976-78 (c).
NUTRIENT DATA: 1971 (c), 1974 (c), 1975 (b), 1976-78 (c).
BIOLOGICAL DATA: 1974 (a), 1975-78 (c).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1970 to current year.

INSTRUMENTATION.--Temperature recorder since October 1970.

REMARKS.--No temperature record Jan. 29 to Feb. 1, Mar. 29 to Apr. 6, June 1-14, due to instrument malfunctions.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum (water years 1971-75, 1977-78), 21.0°C June 30, July 1, 1971 and July 23, 24, 1972; minimum, freezing point on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 19.5°C Aug. 13, 14, 15, 16, 17; minimum recorded, freezing point on many days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TURBIDITY (JTU)	TURBIDITY (NTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)
OCT , 1977												
12...	1330	16	45	6.3	1	--	11.4	101	K20	K15	16	5
28...	0700	9.4	42	6.0	1	--	11.0	92	K5	K5	15	7
APR , 1978												
18...	1700	11	41	7.0	2	--	13.2	100	K20	K30	13	5
MAY												
04...	1300	4.8	42	5.4	2	--	12.1	101	K10	K2	14	7
26...	0900	6.3	48	6.1	3	--	10.8	100	K27	K12	18	3
JUN												
15...	0800	5.3	44	6.0	5	--	11.2	99	K15	52	16	8
JUL												
20...	0830	1.3	73	5.5	--	3.0	9.8	99	260	88	28	4
AUG												
01...	1530	1.1	70	6.6	--	6.0	9.4	95	K20	K150	29	6
SEP												
12...	1330	.70	90	6.7	--	7.0	9.8	98	30	59	--	--

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)
OCT , 1977												
12...	4.6	1.1	1.7	.8	14	0	11	--	1.3	--	--	32
28...	4.3	1.0	1.2	.7	10	0	8	--	.3	--	--	34
APR , 1978												
18...	3.8	.9	1.7	.6	10	0	8	--	2.5	--	--	30
MAY												
04...	4.1	1.0	1.7	.6	9	0	7	--	1.9	--	--	30
26...	5.2	1.1	2.0	.7	18	0	15	--	2.5	--	--	33
JUN												
15...	4.6	1.1	1.9	.7	10	0	8	--	2.3	--	--	31
JUL												
20...	8.1	1.8	2.3	.8	--	--	24	6.6	1.7	.0	3.4	48
AUG												
01...	8.2	2.0	2.5	.8	--	--	23	6.3	3.5	.1	3.3	41
SEP												
12...	--	--	--	--	--	--	29	--	--	--	--	--

K Results based on colony count outside the acceptable range (non-ideal colony count).

01425675 OQUAGA CREEK NEAR NORTH SANFORD, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SOLIDS, RESIDUE AT 105 DEG. C, SUS- PENDED (MG/L)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
OCT , 1977											
12...	3	--	--	--	--	--	--	--	--	--	--
28...	0	.04	.00	.04	.00	.15	.15	.19	.01	.00	--
APR , 1978											
18...	3	.16	.00	.16	.00	.08	.08	.24	.01	.00	.10
MAY											
04...	6	.09	.00	.09	.00	.17	.17	.26	.00	.00	--
26...	12	.05	.00	.05	.00	.12	.12	.17	.01	.00	.00
JUN											
15...	4	.10	.00	.10	.03	.17	.20	.30	.01	.00	--
JUL											
20...	3	.25	.00	.25	.00	.38	.38	.63	.01	.00	--
AUG											
01...	0	.29	.01	.30	.00	.25	.25	.55	.02	.00	.00
SEP											
12...	10	.45	.00	.45	.00	.06	.06	.51	.01	.01	.00

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	13.5	13.5	9.0	8.5	4.5	4.5	2.0	2.0	---	---	1.0	1.0
2	13.5	13.5	9.0	8.5	4.5	4.0	2.0	2.0	.0	.0	1.0	1.0
3	13.5	13.5	9.0	8.5	4.0	4.0	2.0	2.0	.0	.0	1.0	1.0
4	13.5	13.0	9.5	9.0	4.0	3.5	2.0	2.0	.0	.0	1.0	1.0
5	13.0	13.0	9.5	9.5	3.5	3.5	2.0	2.0	.0	.0	1.0	1.0
6	13.0	13.0	9.5	9.5	3.5	3.5	2.0	2.0	.0	.0	1.5	1.0
7	13.0	12.0	10.0	9.5	3.5	3.5	2.0	2.0	.0	.0	1.0	1.0
8	12.0	11.5	10.5	10.0	3.5	3.5	2.0	1.5	.0	.0	2.0	1.0
9	11.5	11.5	10.5	10.5	3.5	3.5	1.5	1.0	.0	.0	1.5	1.0
10	11.5	11.5	10.5	10.5	3.5	3.0	1.0	1.0	.0	.0	1.5	1.5
11	11.5	11.0	10.5	10.0	3.0	3.0	1.0	1.0	.0	.0	1.5	1.5
12	11.0	11.0	10.0	9.5	3.0	3.0	1.0	1.0	.0	.0	1.5	1.5
13	11.0	11.0	9.5	9.0	3.0	3.0	1.0	1.0	.0	.0	1.5	1.5
14	11.0	10.5	9.0	8.5	3.0	3.0	1.0	1.0	.0	.0	1.5	1.5
15	10.5	10.5	8.5	8.5	3.0	3.0	1.0	.5	.0	.0	2.0	1.5
16	10.5	10.0	8.5	8.0	3.0	3.0	.5	.5	.0	.0	2.0	1.5
17	10.0	9.0	8.0	8.0	3.0	3.0	.5	.5	.0	.0	2.0	1.5
18	9.0	9.0	8.0	8.0	3.0	3.0	.5	.5	.0	.0	3.0	2.0
19	9.0	9.0	8.0	7.0	3.0	3.0	.5	.0	.5	.0	3.5	3.0
20	9.0	9.0	7.0	7.0	3.0	3.0	.0	.0	.5	.5	3.5	3.5
21	9.0	9.0	7.0	7.0	3.0	3.0	.0	.0	.5	.5	3.5	3.5
22	9.0	9.0	7.0	6.5	3.0	3.0	.0	.0	.5	.5	3.5	3.5
23	9.0	8.5	6.5	6.5	3.0	3.0	.0	.0	.5	.5	3.5	3.0
24	8.5	8.5	6.5	6.5	3.0	3.0	.0	.0	.5	.5	3.0	3.0
25	8.5	8.5	6.5	6.0	3.0	3.0	.0	.0	.5	.5	3.0	3.0
26	8.5	8.5	6.0	5.5	3.0	3.0	.0	.0	.5	.5	3.0	3.0
27	8.5	8.5	5.5	5.0	3.0	2.0	.0	.0	.5	.5	3.5	3.0
28	8.5	8.5	5.0	4.5	2.0	2.0	.0	.0	1.0	.5	3.5	3.5
29	8.5	8.5	4.5	4.5	2.0	2.0	---	---	---	---	---	---
30	8.5	8.5	4.5	4.5	2.0	2.0	---	---	---	---	---	---
31	8.5	8.5	---	---	2.0	2.0	---	---	---	---	---	---
MONTH	13.5	8.5	10.5	4.5	4.5	2.0	2.0	.0	1.0	.0	3.5	1.0

01425675 OQUAGA CREEK NEAR NORTH SANFORD, NY--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	8.5	8.5	---	---	17.0	16.5	17.0	16.0	16.5	16.0
2	---	---	9.5	8.5	---	---	17.0	17.0	19.0	17.0	16.5	14.5
3	---	---	9.5	9.0	---	---	17.0	17.0	19.0	18.5	16.5	15.0
4	---	---	9.5	8.5	---	---	17.0	17.0	19.0	18.5	16.5	16.0
5	---	---	9.0	9.0	---	---	17.0	16.0	18.5	17.0	16.5	15.0
6	---	---	9.0	9.0	---	---	17.0	16.0	18.5	18.0	17.0	16.0
7	3.0	3.0	9.5	9.0	---	---	17.0	15.5	18.0	18.0	18.0	16.5
8	3.0	3.0	9.5	9.0	---	---	17.0	16.0	19.0	18.0	16.5	14.5
9	3.0	3.0	10.0	9.5	---	---	16.5	16.0	19.0	19.0	15.0	14.5
10	3.5	3.0	9.5	9.5	---	---	17.0	16.0	19.0	19.0	14.5	13.5
11	3.5	3.5	10.0	9.5	---	---	16.5	15.0	19.0	19.0	16.0	14.5
12	3.5	3.5	10.0	9.5	---	---	16.5	14.0	19.0	19.0	16.5	15.5
13	4.0	3.5	10.0	9.5	---	---	17.0	14.5	19.5	19.0	15.5	14.5
14	4.5	4.0	9.5	9.5	---	---	17.0	16.0	19.5	19.0	14.5	13.0
15	4.5	4.5	10.0	9.5	11.5	11.0	18.0	16.5	19.5	18.0	15.0	14.0
16	4.5	4.5	10.0	10.0	11.5	11.0	17.0	16.5	19.5	19.0	15.5	15.0
17	4.5	4.5	10.0	10.0	11.5	11.5	17.0	16.5	19.5	18.5	15.5	14.0
18	5.0	4.5	10.5	10.0	13.0	11.5	18.0	15.0	18.5	17.0	15.5	15.0
19	5.0	5.0	11.5	10.5	13.0	12.0	16.5	15.5	19.0	16.0	15.5	15.5
20	5.0	5.0	11.5	11.0	13.0	13.0	18.0	16.0	19.0	18.0	16.0	15.5
21	5.0	5.0	11.5	11.5	13.5	13.0	18.5	16.5	18.0	15.5	16.5	15.5
22	5.5	5.0	11.5	11.0	14.0	13.5	18.5	17.0	17.0	15.5	16.5	15.0
23	6.0	5.5	11.5	11.0	14.5	13.5	19.0	17.0	17.0	15.5	15.0	13.5
24	6.0	6.0	11.5	11.5	15.0	14.5	18.5	17.0	18.5	16.5	14.0	12.0
25	6.5	6.0	13.0	11.5	15.5	15.0	18.0	16.0	18.5	17.0	13.5	13.0
26	6.5	6.5	13.0	12.0	15.5	15.5	18.0	17.0	17.0	16.0	13.0	11.0
27	7.0	6.5	13.0	12.0	16.0	15.5	18.0	18.0	17.0	15.5	13.0	10.5
28	8.0	7.0	13.5	12.0	16.0	16.0	18.0	16.0	17.0	17.0	12.0	11.5
29	8.0	8.0	13.5	13.0	16.5	16.0	16.5	15.0	18.0	17.0	11.5	10.0
30	8.5	8.0	13.5	13.0	16.5	16.5	16.5	16.0	17.0	16.5	11.0	10.5
31	---	---	13.5	13.0	---	---	16.5	15.5	17.0	16.5	---	---
MONTH	8.5	3.0	13.5	8.5	16.5	11.0	19.0	14.0	19.5	15.5	18.0	10.0

01426500 WEST BRANCH DELAWARE RIVER AT HALE EDDY, NY

LOCATION.--42°00'11", long 75°23'02", Delaware County, Hydrologic Unit 02040101, on left bank at downstream side of bridge on County Highway 56 in Hale Eddy, and 9 mi (14 km) upstream from confluence of East and West Branches near Hancock. Water-quality sampling site at discharge station.

DRAINAGE AREA.--593 mi^2 (1,536 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1912 to current year.

REVISED RECORDS.--WSP 756: Drainage area. WSP 871: 1916.

GAGE.--Water-stage recorder. Datum of gage is 946.46 ft (288.481 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 8, 1928, nonrecording gage.

REMARKS.--Records good except those for winter periods, which are poor. Subsequent to October 1963, entire flow from 454 mi^2 (1,176 km^2) drainage area controlled by Cannonsville Reservoir (see Reservoirs in Delaware River Basin). Part of flow diverted for New York City municipal supply. Remainder of flow (except for conservation releases and spill) impounded for release during periods of low flow in the lower Delaware River basin, as directed by the Delaware River Master.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 28,900 ft^3/s (818 m^3/s) Mar. 22, 1948, gage height, 15.69 ft (4,782 m); maximum gage height, 15.8 ft (4.82 m) Sept. 30, 1924, from graph based on gage readings; minimum discharge, 17 ft^3/s (0.48 m^3/s) Oct. 20, 1963; minimum gage height, 1.03 ft (0.314 m) Aug. 4, 1936.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 10, 1903, reached a stage of 20.3 ft (6.19 m), from floodmarks, discharge, about 46,000 ft^3/s (1,300 m^3/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8,620 ft^3/s (244 m^3/s) Jan. 27, gage height, 9.54 ft (2.908 m); minimum, 77 ft^3/s (2.18 m^3/s) Sept. 21, gage height, 1.43 ft (0.436 m) minimum daily, 100 ft^3/s (2.83 m^3/s) Sept. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	610	726	2580	1200	1940	340	4390	707	584	671	606	533
2	982	646	4170	1100	1660	330	5340	477	545	467	829	664
3	688	580	4130	1000	1450	330	4670	294	576	650	623	783
4	580	534	3610	864	1260	320	3960	219	549	613	829	662
5	433	588	3060	852	1110	310	4290	203	514	447	767	666
6	480	564	2710	827	1000	310	3890	256	477	412	1960	783
7	402	580	2300	805	940	310	4140	226	466	444	1080	772
8	331	1420	1950	795	680	310	4160	208	770	504	795	1010
9	787	1750	1740	5590	620	350	3550	328	879	430	613	1160
10	804	2170	1520	7680	780	400	3060	308	877	410	536	847
11	595	4460	1300	5380	740	260	2850	278	810	403	485	712
12	480	4210	1150	3920	700	250	3230	256	734	390	638	540
13	389	3590	1150	3090	660	260	3090	244	950	404	601	757
14	372	2970	1650	2440	640	350	2890	243	780	747	608	877
15	1860	2480	3630	2070	600	1130	2530	245	619	841	409	1080
16	1280	2140	4250	1680	580	1490	2190	251	519	482	399	1110
17	4780	1920	3790	1470	540	1440	1890	427	469	436	488	809
18	6380	1870	3250	1300	500	1330	1650	669	459	417	704	612
19	6910	1770	2810	1200	480	1230	1490	878	576	632	789	176
20	6950	1600	2390	1100	450	1190	1550	1010	510	691	710	100
21	5420	1500	2270	1000	440	1480	1750	992	479	868	882	133
22	4110	1440	2230	940	420	3650	1620	1090	556	950	1110	399
23	3110	1350	1970	860	400	4130	1460	1060	485	711	940	291
24	2350	1270	1750	800	380	4260	1350	1020	476	684	980	259
25	1930	1210	1910	840	370	3610	1210	1010	463	720	1100	573
26	1710	1280	2100	5200	370	3140	1110	915	472	816	1180	1020
27	1550	1240	1860	8090	390	4350	1030	824	452	948	987	1040
28	1320	1180	1590	5750	360	5780	938	745	441	955	875	1110
29	1140	1110	1410	4070	---	5400	857	682	433	1050	809	1150
30	976	1080	1330	3150	---	4630	791	625	632	1060	363	1080
31	838	---	1300	2240	---	4140	---	577	---	571	283	---
TOTAL	60547	49228	72860	77313	20860	56810	76926	17267	17554	19824	23976	21708
MEAN	1953	1641	2350	2494	745	1833	2564	557	585	639	773	724
MAX	6950	4460	4250	8090	1940	5780	5340	1090	950	1060	1960	1160
MIN	331	534	1150	795	360	250	791	203	433	390	283	100

CAL YR 1977 TOTAL 508969 MEAN 1394 MAX 12500 MIN 40
WTR YR 1978 TOTAL 514875 MEAN 1411 MAX 8090 MIN 100

01426500 WEST BRANCH DELAWARE RIVER AT HALE EDDY, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1958-59, 1968 to current year.
CHEMICAL DATA: 1958-59 (d), 1970 (b), 1971-74 (d), 1975 (c).
MINOR ELEMENTS DATA: 1971-74 (a).
ORGANIC DATA: TOC--1974 (a), 1975 (c).
NUTRIENT DATA: 1971-74 (d), 1975 (c).
BIOLOGICAL DATA:
Coliform bacteria--1971 (c), 1973 (c), 1974 (d), 1975 (c).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1967 to current year (no winter record, except water years 1968 and 1978).

INSTRUMENTATION.--Temperature recorder since October 1967.

REMARKS.--Water temperature is affected by release of water from upstream reservoir. Missing temperature record due to instrument malfunctions.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum (water years 1968-77), 30.5°C July 22, 23, 1972; minimum (water years 1968 and 1978), freezing point on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Minimum recorded, freezing point on many days during winter period.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	12.0	7.5	9.5	5.5	4.0	4.5	---	---	---
2	---	---	---	11.5	9.0	10.0	6.5	5.0	6.0	---	---	---
3	---	---	---	13.0	10.0	11.0	6.5	6.0	6.0	---	---	---
4	---	---	---	12.5	11.5	12.0	6.0	5.5	6.0	---	---	---
5	---	---	---	13.5	11.5	12.0	5.5	3.5	4.5	---	---	---
6	---	---	---	---	---	---	4.0	3.0	3.5	---	---	---
7	---	---	---	---	---	---	3.0	2.0	2.5	---	---	---
8	8.5	6.5	7.0	11.0	10.0	10.5	4.0	2.5	3.0	---	---	---
9	11.5	7.5	9.5	11.5	10.5	11.0	3.5	2.0	3.0	---	---	---
10	10.5	9.0	9.5	11.5	10.5	11.0	3.0	1.5	2.0	---	---	---
11	10.5	7.0	9.0	10.5	9.5	10.0	---	---	---	---	---	---
12	10.5	8.5	9.5	10.0	9.5	10.0	---	---	---	---	---	---
13	8.5	6.5	7.5	10.0	9.5	9.5	---	---	---	---	---	---
14	7.5	6.5	7.0	9.5	9.0	9.5	---	---	---	---	---	---
15	8.5	6.5	7.5	9.5	9.0	9.5	---	---	---	---	---	---
16	8.5	7.5	8.0	10.0	9.5	9.5	---	---	---	---	---	---
17	8.5	7.0	7.5	10.5	9.5	10.0	---	---	---	---	---	---
18	11.0	8.0	9.5	9.0	7.0	8.0	---	---	---	---	---	---
19	11.0	10.5	10.5	8.5	7.0	7.5	---	---	---	---	---	---
20	11.5	10.5	11.0	8.0	5.5	7.0	---	---	---	---	---	---
21	12.0	11.5	12.0	8.5	5.5	7.5	---	---	---	---	---	---
22	11.5	11.5	11.5	7.5	5.5	7.0	---	---	---	---	---	---
23	11.5	11.0	11.0	8.0	6.0	6.5	---	---	---	---	---	---
24	11.5	10.5	11.0	7.5	6.5	7.0	---	---	---	---	---	---
25	12.0	10.5	11.0	7.0	6.0	6.5	---	---	---	---	---	---
26	12.0	11.0	11.5	6.0	4.5	5.5	---	---	---	---	---	---
27	12.5	11.5	12.0	6.0	4.0	4.5	---	---	---	---	---	---
28	12.0	9.5	11.5	7.0	4.5	5.5	---	---	---	---	---	---
29	11.5	9.0	10.0	6.5	5.5	5.5	---	---	---	1.5	.5	1.5
30	10.5	8.5	9.5	6.0	5.5	5.5	---	---	---	1.0	.0	.0
31	11.5	8.0	9.5	---	---	---	---	---	---	.5	.0	.0
MONTH	12.5	6.5	9.5	13.5	4.0	8.5	6.5	1.5	4.0	1.5	.0	.5

01426500 WEST BRANCH DELAWARE RIVER AT HALE EDDY, NY--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	.0	.0	.0	.5	.0	.0	4.0	2.5	3.0	7.0	3.5	5.0
2	.0	.0	.0	1.0	.0	.0	3.5	2.5	3.0	11.0	3.5	7.0
3	.0	.0	.0	.0	.0	.0	3.0	2.5	2.5	12.5	5.5	9.0
4	.0	.0	.0	.0	.0	.0	3.0	2.5	2.5	11.5	6.5	9.5
5	.0	.0	.0	1.0	.0	.0	3.0	3.0	3.0	9.5	7.0	8.0
6	.0	.0	.0	1.0	.0	.5	3.5	2.5	3.0	7.0	6.0	7.0
7	.0	.0	.0	1.5	.5	1.0	4.0	3.0	3.5	11.0	7.0	8.5
8	.5	.0	.0	1.5	.5	1.0	3.5	3.0	3.0	11.5	8.0	10.0
9	.0	.0	.0	1.5	.5	1.0	4.5	2.5	3.5	12.5	9.0	10.5
10	.0	.0	.0	4.0	.5	2.0	4.5	3.0	3.5	11.0	9.0	10.0
11	.0	.0	.0	3.0	.0	1.5	5.0	3.5	4.0	17.5	8.0	12.5
12	.0	.0	.0	3.0	1.5	2.5	5.5	3.5	4.5	16.0	11.5	14.0
13	---	---	---	5.0	1.5	3.0	5.5	4.0	4.5	13.5	11.5	12.0
14	---	---	---	3.0	1.5	2.0	4.5	4.0	4.5	13.0	11.5	12.0
15	.0	.0	.0	1.5	1.0	1.5	4.5	3.5	4.0	13.0	11.0	11.5
16	.0	.0	.0	1.5	1.0	1.5	5.0	3.5	4.5	12.0	10.5	11.5
17	---	---	---	3.0	1.0	1.5	5.0	3.5	4.5	10.5	10.0	10.0
18	.5	.0	.0	2.5	.5	1.5	6.5	3.5	5.0	11.5	9.5	10.5
19	.5	.0	.0	3.5	1.0	2.0	5.0	4.0	4.5	15.5	9.0	12.0
20	.0	.0	.0	4.0	.5	2.0	5.0	4.5	4.5	15.5	9.5	12.0
21	.0	.0	.0	4.5	1.5	2.5	4.5	3.5	4.0	12.5	9.5	11.0
22	.5	.0	.0	2.5	1.5	2.0	---	---	---	15.0	9.0	11.5
23	---	---	---	3.5	2.0	2.5	7.5	2.5	4.5	15.5	10.5	12.5
24	1.0	.0	.0	3.0	2.0	2.5	8.0	3.0	5.0	13.0	11.0	12.0
25	.5	.0	.0	2.5	2.0	2.0	8.5	3.0	5.5	18.0	12.5	14.5
26	1.5	.0	.5	2.0	2.0	2.0	9.0	4.0	6.5	19.0	13.0	16.0
27	.5	.0	.0	2.5	2.0	2.0	9.5	5.0	7.0	21.5	15.0	18.0
28	1.5	.0	.5	3.0	2.0	2.5	10.0	5.0	7.0	21.5	15.5	18.0
29	---	---	---	3.0	2.0	2.5	9.0	5.0	7.0	22.0	16.5	19.0
30	---	---	---	3.5	2.0	2.5	9.5	4.0	6.5	22.5	17.5	20.0
31	---	---	---	3.5	2.0	3.0	---	---	---	22.5	19.0	20.5
MONTH	1.5	.0	.0	5.0	.0	1.5	10.0	2.5	4.5	22.5	3.5	12.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	22.0	17.0	19.0	14.0	6.0	9.5	11.5	8.5	10.5			
2	23.5	17.0	20.0	15.0	6.0	10.5	14.0	8.0	10.5			
3	20.0	17.0	17.5	11.5	7.0	8.5	15.5	9.0	12.0			
4	21.5	15.5	18.0	---	---	---	14.5	8.0	11.0			
5	19.5	15.0	17.0	---	---	---	14.0	8.0	11.0			
6	21.5	13.5	17.5	---	---	---	18.0	10.5	15.0			
7	17.5	14.5	15.5	---	---	---	16.5	14.5	15.5			
8	18.0	15.5	17.0	---	---	---	18.5	13.5	15.5			
9	18.0	14.5	16.0	---	---	---	17.5	12.5	14.5			
10	20.5	14.5	17.0	---	---	---	18.0	11.5	14.5			
11	21.5	15.0	18.0	14.5	9.0	11.5	15.5	10.5	13.0			
12	22.0	15.0	18.5	17.5	8.0	12.5	14.0	10.5	12.0			
13	19.0	11.5	14.5	18.0	9.0	13.5	---	---	---			
14	14.5	9.5	12.0	16.0	9.5	13.5	---	---	---			
15	16.0	7.5	11.5	12.5	7.0	9.5	---	---	---			
16	15.5	8.0	11.5	13.5	6.5	9.5	---	---	---			
17	12.0	8.5	10.0	12.5	9.5	11.0	---	---	---			
18	16.0	8.5	12.0	16.5	7.0	11.0	---	---	---			
19	15.5	10.0	12.5	13.5	7.5	10.5	---	---	---			
20	17.5	9.0	13.0	---	---	---	---	---	---			
21	15.0	9.0	12.0	---	---	---	---	---	---			
22	16.0	10.5	13.0	---	---	---	---	---	---			
23	15.5	8.5	11.5	---	---	---	---	---	---			
24	16.0	7.5	11.5	---	---	---	---	---	---			
25	15.5	8.0	11.5	---	---	---	---	---	---			
26	12.0	8.0	9.5	---	---	---	---	---	---			
27	16.5	8.5	12.5	13.0	8.0	10.0	---	---	---			
28	16.0	9.0	12.5	11.5	8.0	9.5	---	---	---			
29	17.0	8.0	12.5	11.0	7.5	9.0	---	---	---			
30	14.5	8.5	11.5	10.5	8.0	9.0	---	---	---			
31	---	---	---	10.5	7.5	9.0	---	---	---			
MONTH	23.5	7.5	14.0	18.0	6.0	10.5	18.5	8.0	13.0			

01427207 DELAWARE RIVER AT LORDVILLE, NY

LOCATION.--Lat 41°52'05", long 75°12'50", Delaware County, Hydrologic Unit 02040101, at Lordville-Equinunk Interstate Bridge at Lordville, 50 ft (15 m) downstream from Humphries Brook, and 6.5 mi (10.4 km) southeast of Hancock.

DRAINAGE AREA.--1,587 mi² (4,110 km²).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1967 to August 1971, June 1973 to current year.

INSTRUMENTATION.--Temperature recorder since October 1967.

REMARKS.--No record Oct. 4-12, July 5 to Sept. 12, due to instrument damage.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum (water years 1968-70, 73, 1975-77) 30.5°C June 16, 1976; minimum (water years 1968-71, 74, 77, 78), freezing point on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Minimum, freezing point on many days during winter period.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	14.0	13.0	13.5	8.5	7.0	8.0	4.0	3.0	3.5	.0	.0	.0
2	14.0	13.0	13.5	10.0	6.5	9.0	5.0	4.0	4.5	.0	.0	.0
3	13.0	11.5	12.0	11.5	10.0	10.5	4.5	4.0	4.5	.0	.0	.0
4	---	---	---	13.0	12.0	12.5	4.5	3.5	4.0	.0	.0	.0
5	---	---	---	13.5	13.0	13.0	3.5	1.5	2.5	.0	.0	.0
6	---	---	---	13.0	12.5	12.5	3.0	1.5	2.5	.5	.0	.0
7	---	---	---	12.5	11.5	12.0	2.5	1.5	2.0	.0	.0	.0
8	---	---	---	11.5	10.0	10.5	1.5	.5	1.0	.0	.0	.0
9	---	---	---	11.0	10.5	10.5	1.5	.5	1.0	.5	.0	.0
10	---	---	---	11.5	11.0	11.0	.5	.0	.0	.0	.0	.0
11	---	---	---	11.0	8.0	9.0	.0	.0	.0	.5	.0	.0
12	---	---	---	8.0	7.0	7.5	.0	.0	.0	.5	.0	.5
13	11.0	9.5	10.0	7.5	6.5	7.0	.0	.0	.0	.5	.5	.5
14	9.5	8.5	9.0	6.5	6.0	6.0	.5	.0	.0	.5	.0	.0
15	9.0	8.0	8.5	7.5	5.0	6.5	1.5	.0	.5	.0	.0	.0
16	9.0	8.0	8.5	8.5	7.0	8.0	3.5	2.0	2.5	.0	.0	.0
17	9.0	7.0	8.0	9.0	8.5	8.5	3.0	2.5	3.0	.0	.0	.0
18	9.5	7.0	8.0	8.5	5.5	7.5	2.5	1.5	2.0	.0	.0	.0
19	9.5	9.5	9.5	6.5	6.0	6.5	2.5	2.0	2.5	.0	.0	.0
20	10.5	9.5	10.0	6.0	5.0	5.5	2.5	2.0	2.5	.0	.0	.0
21	11.0	10.0	10.5	6.5	5.5	6.0	2.0	1.5	2.0	.0	.0	.0
22	10.5	10.0	10.0	6.5	6.0	6.0	2.0	1.5	2.0	.0	.0	.0
23	10.5	9.0	9.5	6.0	5.0	5.5	1.5	1.0	1.0	.0	.0	.0
24	9.5	8.0	9.0	6.0	5.0	5.5	1.5	.5	1.0	.0	.0	.0
25	10.0	8.5	9.5	5.5	5.0	5.0	2.0	1.5	1.5	.0	.0	.0
26	11.0	9.5	10.0	4.5	2.5	3.5	1.5	.0	.5	.0	.0	.0
27	12.5	11.0	11.5	2.5	1.0	1.5	.0	.0	.0	.0	.0	.0
28	12.0	11.0	11.5	2.5	1.0	2.0	.0	.0	.0	.0	.0	.0
29	11.0	9.5	10.5	3.0	2.5	3.0	.0	.0	.0	.0	.0	.0
30	10.0	8.5	9.5	3.0	3.0	3.0	.0	.0	.0	.0	.0	.0
31	9.0	7.5	8.0	---	---	---	.0	.0	.0	.0	.0	.0
MONTH	14.0	7.0	10.0	13.5	1.0	7.5	5.0	.0	1.5	.5	.0	.0

01427207 DELAWARE RIVER AT LORDVILLE, NY--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	.0	.0	.0	.0	.0	.0	2.5	1.5	2.0	7.0	5.5	6.0
2	.0	.0	.0	.0	.0	.0	2.5	1.5	2.0	6.5	4.5	5.5
3	.0	.0	.0	.0	.0	.0	2.0	.5	1.0	7.5	6.0	6.5
4	.0	.0	.0	.0	.0	.0	1.0	.5	.5	8.0	7.0	7.5
5	.0	.0	.0	.0	.0	.0	1.5	1.0	1.0	8.0	6.5	7.0
6	.0	.0	.0	.0	.0	.0	2.0	1.0	1.5	6.5	5.5	5.5
7	.0	.0	.0	.0	.0	.0	2.5	2.0	2.0	6.5	5.0	5.5
8	.0	.0	.0	.0	.0	.0	2.5	1.5	2.0	7.0	6.0	6.5
9	.0	.0	.0	.0	.0	.0	2.5	1.0	1.5	8.5	7.0	7.5
10	.0	.0	.0	.0	.0	.0	3.0	1.5	2.5	8.5	8.0	8.0
11	.0	.0	.0	.0	.0	.0	4.0	2.5	3.0	9.5	7.0	8.0
12	.0	.0	.0	.0	.0	.0	4.5	3.0	3.5	10.0	9.0	9.5
13	.0	.0	.0	.0	.0	.0	4.5	3.5	4.0	10.0	9.0	9.5
14	.0	.0	.0	.0	.0	.0	4.0	3.0	3.5	9.0	8.5	8.5
15	.0	.0	.0	.0	.0	.0	3.0	2.5	2.5	8.5	8.5	8.5
16	.0	.0	.0	.0	.0	.0	3.0	2.0	2.5	8.5	8.0	8.5
17	.0	.0	.0	.0	.0	.0	3.5	2.5	3.0	8.0	7.5	8.0
18	.0	.0	.0	.0	.0	.0	4.5	2.5	3.5	8.0	7.5	7.5
19	.0	.0	.0	.0	.0	.0	4.5	3.5	4.0	9.5	7.5	8.0
20	.0	.0	.0	.5	.0	.0	3.5	3.5	3.5	10.0	9.0	9.5
21	.0	.0	.0	1.0	.0	.0	3.5	3.0	3.5	10.0	9.5	10.0
22	.0	.0	.0	1.0	.0	.5	4.5	2.5	3.5	9.5	8.5	9.0
23	.0	.0	.0	1.5	.0	.5	5.5	3.5	4.5	10.0	9.0	9.5
24	.0	.0	.0	1.5	.5	1.0	6.0	4.5	5.0	10.5	9.0	10.0
25	.0	.0	.0	1.5	.0	.5	6.5	5.0	5.5	11.0	8.5	9.5
26	.0	.0	.0	.5	.0	.0	7.0	6.0	6.5	12.5	11.0	11.5
27	.0	.0	.0	.5	.0	.0	7.5	6.5	7.0	14.5	12.0	13.0
28	.0	.0	.0	1.0	.5	.5	7.5	6.5	7.0	15.0	14.0	14.5
29	---	---	---	1.5	1.0	1.0	7.5	6.5	7.0	15.5	14.5	15.0
30	---	---	---	2.0	.5	1.0	7.5	6.5	7.0	16.5	15.0	15.5
31	---	---	---	2.0	1.0	1.5	---	---	---	17.0	16.0	16.5
MONTH	.0	.0	.0	2.0	.0	.0	7.5	.5	3.5	17.0	4.5	9.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	16.5	15.5	16.0	16.0	13.5	14.0				---	---	---
2	16.5	15.0	16.0	13.5	12.0	13.0				---	---	---
3	16.5	14.5	16.0	13.0	11.5	12.5				---	---	---
4	14.5	12.5	13.5	11.5	9.0	10.0				---	---	---
5	14.0	12.5	13.0	---	---	---				---	---	---
6	13.5	12.0	12.5	---	---	---				---	---	---
7	13.5	12.5	13.0	---	---	---				---	---	---
8	12.5	11.5	12.0	---	---	---				---	---	---
9	12.5	12.0	12.5	---	---	---				---	---	---
10	13.5	11.5	12.0	---	---	---				---	---	---
11	14.5	12.5	13.0	---	---	---				---	---	---
12	15.5	14.0	14.5	---	---	---				---	---	---
13	15.5	13.0	14.5	---	---	---				16.0	14.0	15.5
14	13.0	10.5	11.0	---	---	---				16.5	13.5	15.0
15	11.5	10.0	10.5	---	---	---				14.5	13.0	13.5
16	12.0	10.5	11.5	---	---	---				13.5	12.5	13.0
17	12.0	11.0	11.5	---	---	---				14.0	12.0	13.5
18	12.0	10.5	11.0	---	---	---				14.5	14.0	14.0
19	14.5	12.5	13.5	---	---	---				15.5	14.0	14.5
20	15.5	13.5	14.5	---	---	---				19.0	15.5	17.0
21	15.0	14.5	15.0	---	---	---				22.0	17.5	19.5
22	15.0	14.0	14.5	---	---	---				20.5	18.5	20.0
23	14.5	13.5	14.0	---	---	---				18.5	15.5	17.0
24	14.5	13.0	14.0	---	---	---				19.0	15.5	17.0
25	15.0	13.5	14.0	---	---	---				18.5	16.5	17.0
26	15.0	13.5	14.0	---	---	---				16.0	12.5	14.0
27	14.5	12.5	13.0	---	---	---				13.0	11.5	12.5
28	16.5	14.5	15.5	---	---	---				13.5	12.5	12.5
29	16.5	15.0	15.5	---	---	---				12.5	10.5	11.5
30	16.5	15.5	16.0	---	---	---				13.5	11.0	12.0
31	---	---	---	---	---	---				---	---	---
MONTH	16.5	10.0	13.5	16.0	9.0	12.5				22.0	10.5	15.0

01427500 CALLICOON CREEK AT CALLICOON, NY

LOCATION.--Lat 41°45'39", long 75°02'55", Sullivan County, Hydrologic Unit 02040101, on right bank 0.7 mi (1.1 km) southeast of Callicoon, 0.9 mi (1.4 km) upstream from mouth, and 1.0 mi (1.6 km) west of Hortonville.

DRAINAGE AREA.--111 mi² (287 km²).

PERIOD OF RECORD.--August 1940 to current year.

GAGE.--Water-stage recorder. Concrete control since July 1944. Datum of gage is 759.84 ft (231.599 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are poor. Occasional regulation by small pond above station.

AVERAGE DISCHARGE.--38 years, 180 ft³/s (5.098 m³/s), 22.02 in/yr (559 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,000 ft³/s (453 m³/s) Aug. 17, 1947, gage height, 9.68 ft (2.950 m), from rating curve extended above 5,100 ft³/s (144 m³/s) on basis of slope-area measurement of peak flow; minimum, 4.0 ft³/s (0.11 m³/s) July 26, 27, 1965.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,200 ft³/s (62 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 1	2000	2,800	79.3	4.92	1.500
Jan. 9	0530	*a11,000	312	*b8.39	2.557
Jan. 26	0915	--	--	b5.88	1.792
Jan. 26	1400	3,700	105	5.45	1.661
Mar. 27	1630	3,000	85.0	5.05	1.539

a About.
b ice jam.

Minimum discharge, 16 ft³/s (0.45 m³/s) Sept. 14, 15, gage height, 1.19 ft (0.363 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	743	98	1170	160	268	48	800	90	174	31	42	63
2	1020	93	669	140	221	47	1400	90	127	30	37	31
3	517	91	470	120	197	45	900	83	127	29	31	25
4	367	89	375	120	130	44	520	79	146	107	60	23
5	263	91	300	110	120	43	1000	156	120	79	42	23
6	287	92	295	100	110	42	900	203	105	46	156	21
7	240	91	253	100	100	41	1300	196	98	39	120	20
8	190	281	200	130	92	40	1100	167	395	35	120	18
9	1020	258	180	4500	88	40	720	406	282	32	81	18
10	636	199	150	900	84	39	640	412	203	37	60	17
11	411	548	120	600	80	39	800	277	146	59	42	18
12	306	314	120	450	76	39	1200	222	120	34	86	18
13	240	245	110	300	74	38	900	196	136	30	86	18
14	239	203	250	230	72	100	600	211	120	28	60	17
15	557	178	810	200	70	250	400	452	98	29	40	17
16	375	163	542	170	68	220	270	452	88	29	35	17
17	1360	173	411	140	66	210	200	708	81	39	32	17
18	801	242	331	120	64	210	163	1170	79	37	28	19
19	612	176	288	110	62	210	150	827	102	29	25	188
20	614	143	253	100	60	240	247	525	81	26	23	81
21	417	133	368	94	58	632	260	440	79	24	22	60
22	329	147	408	88	56	1080	196	325	92	23	22	59
23	270	129	288	84	54	1160	163	260	72	24	21	40
24	227	125	241	80	52	939	146	378	62	37	21	32
25	197	117	509	120	52	706	133	418	46	28	22	28
26	178	427	400	1500	50	538	122	273	43	24	22	24
27	175	295	250	1200	50	1630	115	219	46	23	20	22
28	152	219	190	757	50	1300	110	196	42	28	22	23
29	130	187	180	565	---	840	102	170	37	25	23	21
30	117	186	180	416	---	800	96	150	34	81	21	20
31	106	---	170	330	---	760	---	150	---	39	65	---
TOTAL	13096	5733	10481	14034	2524	12370	15653	9901	3381	1161	1487	998
MEAN	422	191	338	453	90.1	399	522	319	113	37.5	48.0	33.3
MAX	1360	548	1170	4500	268	1630	1400	1170	395	107	156	188
MIN	106	89	110	80	50	38	96	79	34	23	20	17
CFSM	3.80	1.72	3.05	4.08	.81	3.60	4.70	2.87	1.02	.34	.43	.30
IN.	4.39	1.92	3.51	4.70	.85	4.15	5.25	3.32	1.13	.39	.50	.33

CAL YR 1977 TOTAL 82638 MEAN 226 MAX 2400 MIN 13 CFSM 2.04 IN 27.69
WTR YR 1978 TOTAL 90819 MEAN 249 MAX 4500 MIN 17 CFSM 2.24 IN 30.44

01427510 DELAWARE RIVER AT CALLICOON, NY

LOCATION.--Lat 41°45'24", long 75°03'30", Wayne County, Pennsylvania, Hydrologic Unit 02040101, on right bank, 0.5 mi (0.8 km) downstream from Callicoon Creek, 0.5 mi (0.8 km) downstream from Interstate Bridge 7, and 0.8 mi (1.1 km) southeast of Callicoon. Water-quality sampling site at discharge station.

DRAINAGE AREA.--1,882 mi² (4,719 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1975 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 750 ft (229 m), from topographic map (nearest 20 ft).

REMARKS.--Records fair except those for winter periods, which are poor. Subsequent to September 1954, entire flow from 371 mi² (961 km²) of drainage area controlled by Pepacton Reservoir (see Reservoirs in Delaware River Basin), and subsequent to October 1963, entire flow from 454 mi² (1,176 km²) of drainage area controlled by Cannonsville Reservoir (see Reservoirs in Delaware River Basin). Part of flow from these reservoirs diverted for New York City municipal supply. Remainder of flow (except for conservation releases and spill) impounded for release during period of low flow in the lower Delaware River basin, as directed by the Delaware River Master.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 56,400 ft³/s (1,597 m³/s) Mar. 14, 1977, gage height, 11.49 ft (3.502 m), minimum 335 ft³/s (9.49 m³/s) Sept. 13, 1977, gage height, 2.20 ft (0.671 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 44,900 ft³/s (1,272 m³/s) Jan. 9, gage height, 10.36 ft (3.158 m); minimum, 497 ft³/s (14.1 m³/s) Sept. 25, gage height, 2.50 ft (0.762 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4080	2000	6400	2900	5800	920	12000	1890	1950	944	752	1040
2	12400	1890	11500	2600	4600	900	16800	1660	1740	897	1010	1030
3	7270	1710	11200	2200	4100	900	13800	1330	1600	713	960	993
4	5450	1600	9430	2000	3000	900	11100	1080	1740	1950	1200	1010
5	4080	1580	7680	2000	2500	900	11800	1240	1450	3310	1710	837
6	3380	1770	6960	2000	2100	900	11300	1830	1360	1860	1500	897
7	3200	1600	6010	1900	2000	900	12200	1890	1240	1330	3700	977
8	2560	3520	5100	1900	1900	900	13400	1690	2320	1160	2560	928
9	4710	6010	4540	26000	1800	900	10800	2500	3240	1140	1950	1310
10	8210	5770	3940	30000	1700	900	8940	4120	2780	1010	1400	1200
11	5410	12400	2500	18000	1600	880	8120	3270	2300	1010	1140	977
12	4190	12100	2300	10000	1600	880	10000	2640	1980	928	1180	794
13	3340	9520	2400	8000	1500	880	10100	2370	1920	780	1500	837
14	2840	7590	3200	7000	1400	940	9300	2320	2150	752	1140	808
15	5450	6400	9340	5600	1300	2500	7950	2930	1660	1140	1010	1030
16	5870	5590	11400	4600	1300	4900	6640	3310	1330	1060	851	1310
17	16100	4960	9900	4100	1200	4400	5700	4680	1140	912	808	1120
18	18700	4960	8290	3700	1200	3900	4890	6360	1100	1040	851	944
19	14400	4540	7140	3300	1100	3700	4260	7810	1140	837	1030	1120
20	15300	3970	6180	3000	1100	4000	4640	6960	1240	977	1080	822
21	11700	3560	5840	2700	1000	4540	5450	6500	1120	993	944	634
22	8850	3450	6290	2500	1000	9300	5000	5940	1530	1290	1270	603
23	6920	3200	5450	2400	980	10100	4370	5030	1430	1200	1220	752
24	5630	2960	4750	2300	980	10900	3870	4640	1120	1030	1100	624
25	4710	2750	5170	2500	980	8590	3450	5100	1010	977	1140	564
26	4040	3490	5800	16000	960	7190	3060	4120	944	977	1380	928
27	3630	3600	4500	25000	940	12400	2780	3340	977	1100	1270	1160
28	3240	3100	4000	15000	940	16800	2530	2870	960	1160	1060	1180
29	2750	2810	3800	11000	---	15000	2270	2530	881	1200	1080	1290
30	2400	2670	3600	8400	---	13300	2070	2250	808	1450	851	1220
31	2100	---	3400	6800	---	11800	---	2070	---	1270	794	---
TOTAL	202910	131070	188010	235400	50580	155920	228590	106270	46160	36397	39441	28939
MEAN	6545	4369	6065	7594	1806	5030	7620	3428	1539	1174	1272	965
MAX	18700	12400	11500	30000	5800	16800	16800	7810	3240	3310	3700	1310
MIN	2100	1580	2300	1900	940	880	2070	1080	808	713	752	564

CAL YR 1977 TOTAL 1453915 MEAN 3983 MAX 48000 MIN 347
WTR YR 1978 TOTAL 1449687 MEAN 3972 MAX 30000 MIN 564

Note.--No gage-height record Jan. 9 to Feb. 22.

01427510 DELAWARE RIVER AT CALLICOON, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: June 1975 to current year.

INSTRUMENTATION.--Temperature recorder since June 1975.

REMARKS.--No record Oct. 31 to Nov. 1, July 10-17, Sept. 15-30, due to equipment malfunctions.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum (water years 1976-78), 28.0°C July 16, 20, 1977; minimum freezing point on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum recorded, 27.0°C July 20, minimum, freezing point on many days during winter period.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	14.0	12.5	13.0	---	---	---	3.5	2.5	3.0	.0	.0	.0
2	13.5	12.5	13.0	9.5	7.5	8.5	4.5	3.5	4.0	.0	.0	.0
3	12.5	11.0	12.0	11.0	9.0	10.0	4.5	4.0	4.5	.0	.0	.0
4	11.0	10.0	10.5	13.0	11.0	12.0	4.0	3.5	4.0	.0	.0	.0
5	12.0	10.0	11.0	13.0	12.5	13.0	3.5	1.5	2.5	.0	.0	.0
6	12.0	10.5	11.0	13.0	12.0	12.5	2.0	1.5	2.0	.0	.0	.0
7	11.0	9.5	10.5	12.5	10.5	12.0	2.0	1.0	1.5	.0	.0	.0
8	9.5	9.0	9.0	10.5	9.5	10.0	1.0	.5	.5	.0	.0	.0
9	11.0	9.0	10.0	11.0	10.0	10.5	1.0	.0	.5	.5	.0	.0
10	10.5	10.0	10.0	11.5	11.0	11.0	.0	.0	.0	.0	.0	.0
11	10.5	9.0	9.5	11.0	8.0	9.0	.0	.0	.0	.5	.0	.0
12	11.0	10.0	10.5	7.5	7.0	7.0	.0	.0	.0	.0	.0	.0
13	10.0	9.0	9.5	7.0	5.5	6.5	.0	.0	.0	.0	.0	.0
14	9.0	8.0	8.5	5.5	5.0	5.5	.0	.0	.0	.0	.0	.0
15	8.0	7.5	8.0	6.0	5.0	5.5	1.0	.0	.0	.0	.0	.0
16	8.5	7.5	8.0	7.5	6.0	7.0	3.0	1.0	2.5	.0	.0	.0
17	8.5	7.0	7.5	9.0	7.5	8.0	3.0	3.0	3.0	.0	.0	.0
18	8.0	6.5	7.0	8.0	6.5	7.5	3.0	2.0	2.5	.0	.0	.0
19	9.0	8.0	8.5	6.5	5.5	6.0	2.5	2.0	2.5	.0	.0	.0
20	9.5	8.5	9.0	5.5	5.0	5.0	2.5	2.5	2.5	.0	.0	.0
21	10.0	9.0	9.5	5.5	5.0	5.5	2.0	2.0	2.0	.0	.0	.0
22	10.0	9.0	9.5	5.5	5.0	5.5	2.5	2.0	2.0	.0	.0	.0
23	9.0	8.5	8.5	5.0	5.0	5.0	2.0	1.0	1.5	.0	.0	.0
24	8.5	7.5	8.0	5.5	5.0	5.0	1.5	.5	1.0	.0	.0	.0
25	9.0	7.5	8.0	5.0	4.0	4.5	2.0	1.5	2.0	.0	.0	.0
26	10.0	8.5	9.0	4.0	2.0	3.5	1.5	.0	.5	.0	.0	.0
27	12.5	9.5	11.0	2.0	.5	1.5	.0	.0	.0	.0	.0	.0
28	12.0	10.5	11.5	2.0	.5	1.0	.0	.0	.0	.0	.0	.0
29	11.0	9.5	10.5	2.5	1.5	2.0	.0	.0	.0	.0	.0	.0
30	10.0	8.5	9.0	3.0	2.5	2.5	.0	.0	.0	.0	.0	.0
31	---	---	---	---	---	---	.5	.0	.0	.0	.0	.0
MONTH	14.0	6.5	9.5	13.0	.5	7.0	4.5	.0	1.5	.5	.0	.0

01427510 DELAWARE RIVER AT CALLICOON, NY--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	.0	.0	.0	.0	.0	.0	4.5	3.5	4.0	9.5	7.0	8.5
2	.0	.0	.0	.0	.0	.0	4.5	3.0	3.5	11.0	6.0	8.5
3	.0	.0	.0	.0	.0	.0	3.0	1.5	2.0	13.0	7.0	10.0
4	.0	.0	.0	.0	.0	.0	2.5	1.5	2.0	12.5	8.0	10.5
5	.0	.0	.0	.0	.0	.0	3.0	2.5	3.0	10.5	8.0	9.0
6	.0	.0	.0	.0	.0	.0	4.0	2.5	3.5	8.0	7.5	7.5
7	.0	.0	.0	.0	.0	.0	4.5	4.0	4.5	9.5	7.0	8.0
8	.0	.0	.0	.0	.0	.0	4.5	2.5	3.5	11.5	7.5	9.5
9	.0	.0	.0	.0	.0	.0	4.0	2.0	3.0	13.0	9.5	11.0
10	.0	.0	.0	.0	.0	.0	5.0	3.5	4.5	11.5	10.5	11.0
11	.0	.0	.0	.0	.0	.0	6.0	5.0	5.5	14.5	10.0	12.0
12	.0	.0	.0	.0	.0	.0	7.0	5.5	6.5	14.5	11.5	13.0
13	.0	.0	.0	.0	.0	.0	6.5	6.0	6.5	13.0	12.0	12.5
14	.0	.0	.0	.0	.0	.0	6.0	4.5	5.5	12.0	11.5	12.0
15	.0	.0	.0	.0	.0	.0	4.5	3.5	4.0	12.0	11.0	11.5
16	.0	.0	.0	.0	.0	.0	5.0	3.5	4.5	12.0	11.0	11.5
17	.0	.0	.0	1.0	.0	.0	6.0	4.5	5.0	11.0	10.5	10.5
18	.0	.0	.0	.5	.0	.0	7.5	4.5	6.0	11.0	10.0	10.5
19	.0	.0	.0	1.5	.0	.5	6.5	5.5	6.0	13.5	10.5	12.0
20	.0	.0	.0	2.0	.0	.5	6.0	5.5	5.5	15.0	12.5	13.5
21	.0	.0	.0	3.0	.0	1.0	5.5	5.0	5.5	15.5	13.0	14.0
22	.0	.0	.0	1.5	.0	.5	7.5	4.5	6.0	14.0	11.5	12.5
23	.0	.0	.0	3.0	1.5	2.0	9.0	6.0	7.5	15.0	12.0	13.5
24	.0	.0	.0	3.0	2.0	2.5	10.0	6.5	8.0	13.5	12.5	13.0
25	.0	.0	.0	2.5	1.5	1.5	11.0	7.5	9.0	15.0	12.0	13.0
26	.0	.0	.0	1.5	.5	1.0	12.0	8.0	9.5	18.5	14.0	16.0
27	.0	.0	.0	1.5	.5	1.0	11.5	8.5	10.0	20.0	16.0	18.0
28	.0	.0	.0	2.5	1.5	2.0	12.5	8.5	10.5	21.5	18.0	19.5
29	---	---	---	3.5	2.5	3.0	12.5	9.0	10.5	21.5	18.5	20.0
30	---	---	---	3.5	2.0	2.5	12.0	8.5	10.0	23.5	19.0	21.0
31	---	---	---	4.0	2.5	3.0	---	---	---	23.5	20.0	22.0
MONTH	.0	.0	.0	4.0	.0	.5	12.5	1.5	6.0	23.5	6.0	12.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	22.5	20.0	21.0	23.0	19.0	21.0	17.5	16.0	16.5	21.0	18.5	19.5
2	24.0	19.0	21.5	22.5	17.5	20.0	22.0	17.5	19.5	22.0	18.5	20.0
3	21.5	18.5	20.0	20.5	17.0	18.0	23.0	20.5	22.0	22.0	19.0	20.0
4	20.0	16.5	18.0	17.0	14.5	16.0	23.5	21.5	22.5	20.5	18.5	19.0
5	19.0	15.5	17.0	18.0	14.0	16.0	22.5	21.0	21.5	20.0	17.0	18.5
6	21.0	14.5	18.0	22.0	16.0	19.0	20.5	19.0	20.0	21.5	18.5	19.5
7	18.0	16.5	17.0	24.5	18.5	21.5	20.5	19.0	20.0	21.5	19.5	20.5
8	18.0	16.5	17.0	25.5	21.0	23.5	22.0	20.5	21.0	21.0	17.5	18.5
9	18.5	17.0	17.5	26.5	22.0	24.5	23.5	21.0	22.0	17.5	16.0	16.5
10	19.5	15.5	17.5	---	---	---	24.0	22.0	23.0	15.5	13.5	14.5
11	21.5	16.5	19.0	---	---	---	23.5	21.5	22.0	15.0	15.0	15.0
12	23.0	18.0	20.5	---	---	---	22.0	21.5	21.5	16.0	15.0	15.5
13	21.0	17.0	19.5	---	---	---	23.0	21.0	22.0	17.5	15.5	16.5
14	17.5	15.0	16.0	---	---	---	24.5	21.0	22.5	17.5	15.0	16.0
15	18.5	13.0	16.0	---	---	---	26.0	22.5	24.5	--	---	---
16	19.5	14.0	17.0	---	---	---	26.0	24.0	25.0	---	---	---
17	17.5	16.0	16.5	---	---	---	26.5	24.5	26.0	---	---	---
18	20.0	15.5	17.5	---	---	---	26.0	24.0	25.0	---	---	---
19	23.5	18.0	20.5	26.5	21.5	24.0	26.0	23.0	24.5	---	---	---
20	24.5	19.0	22.0	27.0	23.5	25.5	25.0	22.5	23.0	---	---	---
21	23.0	19.5	21.5	26.5	24.0	25.5	23.0	20.0	21.5	---	---	---
22	23.5	20.0	21.5	26.5	24.5	25.5	22.5	19.0	21.0	---	---	---
23	23.0	18.5	21.0	25.5	23.0	24.5	21.5	18.5	20.0	---	---	---
24	23.0	17.5	20.5	25.5	22.5	24.0	21.0	19.5	20.0	---	---	---
25	23.5	18.0	21.0	24.5	22.5	23.5	21.0	18.0	19.5	---	---	---
26	21.5	19.0	20.0	23.0	21.0	21.5	18.5	17.0	18.0	---	---	---
27	24.5	19.0	21.5	23.0	20.5	21.5	19.5	16.5	18.0	---	---	---
28	25.0	21.0	23.0	23.0	20.5	21.5	19.5	18.5	18.5	---	---	---
29	25.0	20.5	23.0	22.5	19.5	20.5	21.5	18.0	19.5	---	---	---
30	24.0	20.5	22.5	20.5	18.5	19.0	21.0	18.5	19.5	---	---	---
31	---	---	---	19.0	16.5	17.0	20.0	19.0	19.5	---	---	---
MONTH	25.0	13.0	19.5	27.0	14.0	21.5	26.5	16.0	21.5	22.0	13.5	18.0

01427705 DELAWARE RIVER AT SKINNERS FALLS, NY

LOCATION.--Lat 41°40'12", long 75°03'28", Sullivan County, Hydrologic Unit 02040101, at Skinners Falls Interstate Bridge No. 5 at Skinners Falls, 1,000 ft (305 m) downstream from Calkins Creek, and 5.3 miles (8.5 km) north of Narrowsburg.

DRAINAGE AREA.--1,902 mi² (4,926 km²).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1967 to July 1970, June to September 1971, August 1973 to current year.

INSTRUMENTATION.--Temperature recorder since October 1967.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 31.5°C Aug. 2, 1975; minimum, freezing point on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 28.0°C Aug. 17; minimum, freezing point on many days during winter period.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	14.0	13.0	13.5	9.5	7.0	8.5	4.5	3.5	3.5	.5	.0	.0
2	14.0	13.0	13.5	9.5	8.5	9.0	5.0	4.0	4.5	.5	.0	.0
3	13.0	11.5	12.5	11.5	9.5	10.5	5.0	4.5	5.0	1.0	.0	.0
4	12.5	10.5	11.5	13.5	11.5	12.5	4.5	4.0	4.5	.5	.0	.0
5	12.5	10.5	11.5	13.5	13.5	13.5	4.0	2.0	3.0	.5	.0	.0
6	13.0	11.5	12.0	13.5	13.0	13.0	2.5	2.0	2.5	.5	.0	.0
7	12.0	10.5	11.0	13.0	11.5	12.5	2.5	1.5	2.0	.5	.0	.0
8	10.5	9.5	10.0	11.5	10.5	11.0	1.5	1.0	1.0	.5	.0	.5
9	11.0	9.5	10.5	11.5	10.5	11.0	1.5	.5	1.0	1.5	.0	.5
10	11.5	10.5	11.0	12.0	11.0	11.5	.5	.0	.0	.5	.0	.5
11	11.0	9.5	10.5	11.5	9.0	10.0	.0	.0	.0	1.0	.5	.5
12	12.0	10.5	11.0	8.5	7.5	8.0	.0	.0	.0	1.0	.5	.5
13	11.0	10.0	10.5	7.5	6.5	7.0	.0	.0	.0	.5	.5	.5
14	10.0	9.0	9.5	6.5	5.5	6.0	.0	.0	.0	.5	.0	.5
15	9.0	8.0	8.5	6.5	5.5	6.0	1.5	.0	.5	.5	.0	.0
16	9.0	8.5	8.5	8.5	6.5	7.5	3.5	1.5	2.5	.0	.0	.0
17	9.0	7.5	8.5	9.5	8.0	8.5	3.5	3.5	3.5	.0	.0	.0
18	8.5	7.0	7.5	8.5	6.0	8.0	3.5	2.5	3.0	.0	.0	.0
19	9.0	8.5	9.0	7.0	6.0	7.0	3.0	2.5	2.5	.0	.0	.0
20	10.0	9.0	9.5	6.5	5.5	6.0	3.5	3.0	3.0	.0	.0	.0
21	10.5	9.5	10.0	6.5	5.5	6.0	3.0	2.5	2.5	.0	.0	.0
22	10.5	10.0	10.0	6.5	6.0	6.0	3.0	2.5	2.5	.0	.0	.0
23	10.0	9.0	9.5	6.0	5.5	5.5	2.5	1.5	2.0	.0	.0	.0
24	9.0	8.0	8.5	6.0	5.5	6.0	2.0	1.0	1.5	.5	.0	.0
25	10.0	8.0	9.0	5.5	5.0	5.5	3.0	2.0	2.5	.0	.0	.0
26	10.5	9.5	10.0	5.0	3.0	4.0	2.0	.0	1.0	.5	.0	.0
27	13.0	10.5	11.5	3.0	1.5	2.0	.0	.0	.0	.5	.0	.0
28	13.0	12.0	12.5	2.5	1.0	2.0	.0	.0	.0	.5	.5	.5
29	12.0	10.5	11.0	3.0	2.0	2.5	.0	.0	.0	.5	.0	.5
30	11.0	9.0	10.0	3.5	3.0	3.0	.0	.0	.0	.0	.0	.0
31	9.5	7.5	8.5	---	---	---	1.0	.0	.5	.0	.0	.0
MONTH	14.0	7.0	10.5	13.5	1.0	7.5	5.0	.0	2.0	1.5	.0	.0

01427705 DELAWARE RIVER AT SKINNERS FALLS, NY--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	.0	.0	.0	.0	.0	.0	5.5	4.5	5.0	10.5	8.0	9.0
2	.0	.0	.0	.0	.0	.0	5.0	4.0	4.5	11.5	7.0	9.5
3	.0	.0	.0	.0	.0	.0	3.5	2.5	3.0	13.0	8.0	10.5
4	.0	.0	.0	.0	.0	.0	3.0	2.5	2.5	12.5	9.0	11.0
5	.0	.0	.0	.0	.0	.0	4.0	3.0	3.5	11.5	9.0	10.0
6	.0	.0	.0	.0	.0	.0	4.5	3.0	4.0	9.0	8.5	8.5
7	.0	.0	.0	.0	.0	.0	5.5	4.5	5.0	10.5	8.0	9.0
8	.0	.0	.0	.0	.0	.0	5.0	3.5	4.5	11.0	8.5	10.0
9	.0	.0	.0	.0	.0	.0	5.0	3.0	4.0	13.0	10.5	12.0
10	.0	.0	.0	.0	.0	.0	6.0	4.5	5.0	12.5	11.5	12.0
11	.0	.0	.0	.0	.0	.0	7.0	5.5	6.5	15.0	10.5	12.5
12	.0	.0	.0	.0	.0	.0	8.0	6.5	7.0	15.0	12.0	13.5
13	.0	.0	.0	.0	.0	.0	7.5	6.5	7.0	14.0	12.5	13.5
14	.0	.0	.0	.0	.0	.0	6.5	5.5	6.5	13.0	12.5	12.5
15	.0	.0	.0	.0	.0	.0	5.5	4.5	5.0	12.5	11.5	12.0
16	.0	.0	.0	.0	.0	.0	6.0	4.0	5.0	12.5	11.5	12.0
17	.0	.0	.0	.0	.0	.0	7.0	5.5	6.0	11.5	11.0	11.5
18	.0	.0	.0	.0	.0	.0	8.5	5.0	7.0	11.5	10.5	11.0
19	.0	.0	.0	.0	.0	.0	7.0	6.5	7.0	14.5	11.0	12.5
20	.0	.0	.0	.5	.0	.0	7.0	6.5	6.5	16.0	13.0	14.5
21	.0	.0	.0	3.0	.0	1.5	6.5	5.5	6.0	16.5	14.0	15.0
22	.0	.0	.0	2.0	1.0	1.5	8.5	5.5	7.0	15.0	12.5	13.5
23	.0	.0	.0	4.5	2.0	3.0	10.0	6.5	8.0	16.0	13.0	14.5
24	.0	.0	.0	4.0	3.0	3.5	10.5	7.5	9.0	14.5	13.5	14.0
25	.0	.0	.0	3.0	2.0	2.5	12.0	8.0	10.0	15.5	12.5	14.0
26	.0	.0	.0	2.0	1.5	1.5	12.5	8.5	10.5	19.0	14.5	17.0
27	.0	.0	.0	2.5	1.5	2.0	12.0	9.5	11.0	20.5	16.5	18.5
28	.0	.0	.0	3.5	2.5	3.0	13.5	9.5	11.5	22.0	18.5	20.0
29	---	---	---	4.5	3.0	3.5	13.0	9.5	11.5	22.5	19.5	21.0
30	---	---	---	4.0	3.0	3.5	12.5	9.5	11.0	23.5	19.5	21.5
31	---	---	---	4.5	3.0	4.0	---	---	---	24.0	20.5	22.5
MONTH	.0	.0	.0	4.5	.0	1.0	13.5	2.5	6.5	24.0	7.0	13.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	23.5	20.5	22.0	23.5	20.0	22.0	18.5	15.5	17.0	22.0	18.0	20.0
2	24.0	20.0	22.0	22.5	19.0	21.0	22.0	18.0	19.5	22.5	18.5	20.5
3	23.0	19.5	21.0	21.0	18.0	19.5	24.5	20.5	22.5	21.5	19.5	20.5
4	20.5	17.0	19.0	17.5	15.0	17.0	23.5	21.5	22.5	21.0	18.5	20.0
5	19.5	16.5	18.0	19.5	14.5	17.0	22.5	20.5	21.5	21.0	17.5	19.0
6	21.0	15.5	18.5	22.5	17.0	19.5	21.5	19.5	20.5	22.5	18.5	20.5
7	19.5	17.5	18.0	25.0	20.0	22.5	21.5	18.5	20.0	23.0	20.5	21.5
8	18.5	17.0	17.5	25.5	22.0	24.0	22.5	20.5	21.5	21.0	17.5	19.0
9	20.0	17.5	18.5	27.5	23.5	25.5	24.0	20.5	22.0	18.5	16.0	17.0
10	20.5	16.5	18.5	26.5	24.0	25.0	24.5	21.5	23.0	16.5	13.5	15.0
11	22.0	17.0	19.5	24.5	21.5	23.0	23.0	21.5	22.0	17.0	15.0	16.0
12	23.5	19.0	21.0	24.5	19.5	22.0	23.0	21.0	22.0	17.5	15.5	16.5
13	22.5	18.0	20.5	24.5	20.5	22.5	23.5	20.5	22.0	19.0	15.0	17.0
14	18.5	16.0	17.0	24.5	22.5	23.5	25.0	21.0	23.0	18.0	15.0	16.5
15	19.0	14.0	16.5	25.5	22.0	23.5	26.0	22.5	24.5	16.5	15.0	15.5
16	20.0	15.0	17.5	24.0	22.0	23.0	26.5	24.0	25.5	16.0	14.5	15.0
17	19.0	17.0	17.5	23.0	21.0	22.0	28.0	24.5	26.0	16.5	13.5	15.0
18	21.0	16.5	18.5	25.0	20.5	22.5	27.0	23.5	25.0	16.0	15.0	15.5
19	24.0	19.0	21.0	26.0	21.5	23.5	26.5	23.0	24.5	15.5	14.5	15.0
20	25.0	20.0	22.5	27.0	23.5	25.0	25.5	22.5	24.0	18.0	15.0	16.0
21	23.5	21.0	22.5	27.0	24.0	25.5	24.0	20.0	22.0	21.0	17.0	18.5
22	24.0	21.0	22.5	27.0	24.0	25.5	23.5	20.0	21.5	19.5	17.5	19.0
23	23.5	20.0	21.5	26.5	23.5	25.0	22.5	19.0	20.5	20.0	16.0	17.5
24	23.5	19.0	21.5	26.0	22.5	24.5	22.0	19.5	20.5	20.0	16.0	17.5
25	24.0	19.5	22.0	24.5	22.5	23.5	21.0	18.0	19.5	19.5	16.5	17.5
26	22.0	20.5	21.0	22.5	20.5	21.5	20.0	17.0	18.5	18.0	14.5	16.0
27	25.0	20.0	22.0	23.5	20.5	21.5	20.0	16.5	18.5	16.0	13.5	15.0
28	25.5	22.5	24.0	23.5	21.0	22.0	19.5	18.5	19.0	15.5	13.0	14.0
29	26.0	22.0	24.0	21.5	19.5	21.0	22.0	19.0	20.0	15.0	11.5	13.0
30	25.0	22.0	23.5	20.5	18.5	19.5	21.0	19.0	20.0	14.5	11.5	13.0
31	---	---	---	19.0	16.0	17.0	20.0	18.5	19.5	---	---	---
MONTH	26.0	14.0	20.5	27.5	14.5	22.5	28.0	15.5	21.5	23.0	11.5	17.0

01428500 DELAWARE RIVER ABOVE LACKAWAXEN RIVER NEAR BARRYVILLE, NY

LOCATION.--Lat 41°30'31", long 74°59'11" (revised), Sullivan County, Hydrologic Unit 02040101, on left bank 1.6 mi (2.6 km) upstream from Lackawaxen River, and 4.6 mi (7.4 km) northwest of Barryville. Water-quality sampling site at discharge station.

DRAINAGE AREA.--2,023 mi² (5,240 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1940 to current year.

GAGE.--Water-stage recorder. Datum of gage is 600.22 ft (182.947 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are poor. Subsequent to September 1954, entire flow from 371 mi² (961 km²) of drainage area controlled by Pepacton Reservoir (see Reservoirs in Delaware River Basin), and subsequent to October 1963, entire flow from 454 mi² (1,176 km²) of drainage area controlled by Cannonsville Reservoir (see Reservoirs in Delaware River Basin). Part of flow of these reservoirs diverted for New York City municipal supply. Remainder of flow (except for conservation releases and spill) impounded for release during periods of low flow in the lower Delaware River basin, as directed by the Delaware River Master.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 130,000 ft³/s (3,680 m³/s) Aug. 19, 1955, gage height, 26.40 ft (8.047 m) from floodmarks in gage house, from rating curve extended above 55,000 ft³/s (1,560 m³/s) on basis of slope-area measurement at gage height 23.19 ft (7.068 m); minimum, 122 ft³/s (3.46 m³/s) Sept. 5, 1953, gage height, 1.11 ft (0.338 m); minimum daily, 126 ft³/s (3.57 m³/s) Sept. 4, 1953.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 49,400 ft³/s (1,399 m³/s) Jan. 9, gage height, 14.69 ft (4.478 m); minimum, 524 ft³/s (14.84 m³/s) Sept. 26, gage height, 2.19 ft (0.668 m); minimum daily, 646 ft³/s (18.29 m³/s) Sept. 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3430	2270	6400	3100	6280	1100	13700	2160	2190	1030	1130	1130
2	13700	2070	13000	2700	5010	1100	18600	2010	2050	1090	891	1210
3	9180	1920	13000	2300	4400	1100	16200	1720	1870	970	1200	1120
4	6310	1800	11200	2100	3390	1000	13000	1450	1990	1270	1110	1140
5	4700	1760	9110	2100	2500	980	13300	1570	1870	3530	1660	1020
6	3830	1910	8050	2100	2400	1000	13000	2220	1660	2200	1550	943
7	3700	1890	6830	2490	2400	1100	13300	2330	1510	1600	3350	1040
8	3010	3010	5600	2220	2500	1100	15000	2130	1990	1350	2610	1040
9	4180	6400	4900	27800	2400	1100	12600	2590	3430	1310	2190	1280
10	9510	6340	4330	33200	2200	1100	10300	4360	3140	1200	1620	1440
11	6370	12600	3350	20000	2000	1000	9080	3850	2560	1170	1330	1130
12	4750	14200	2430	13500	1900	1000	10600	3120	2200	1130	1240	1070
13	3850	11300	2600	10200	2000	1000	11300	2730	2040	988	1520	718
14	3270	6900	3500	8550	1600	1100	10400	2650	2310	908	1340	1020
15	5460	7270	10000	7170	1700	2500	9040	3370	2010	1110	1210	1040
16	7360	6110	13300	5910	1700	5000	7490	3850	1650	1290	970	1310
17	14200	5350	11600	4950	1700	4400	6230	5710	1450	1050	908	1340
18	22200	5300	9690	4200	1500	4000	5250	7750	1350	1160	908	1090
19	16500	4880	8280	3600	1400	3800	4550	10000	1330	1080	1070	1350
20	17300	4240	6980	3300	1400	4000	4730	8520	1420	1030	1150	1020
21	14200	3760	6460	3000	1400	5000	5740	7560	1310	1120	1090	842
22	10800	3610	7430	2700	1400	11000	5410	6800	1430	1290	1150	653
23	8420	3410	6230	2500	1300	12500	4630	5650	1740	1390	1420	786
24	6610	3180	5300	2400	1200	14200	4110	5090	1360	1210	1230	747
25	5410	2990	5360	2700	1200	11600	3740	5850	1210	1130	1250	646
26	4630	3850	6400	14000	1230	8970	3370	4750	1130	1120	1370	667
27	4150	4200	5000	27000	1300	13200	3060	3850	1120	1130	1470	1260
28	3780	3550	4200	16000	1250	20400	2800	3290	1110	1320	1310	1280
29	3270	3200	3900	12000	---	18100	2540	2880	1040	1290	1120	1350
30	2900	3010	3800	9500	---	16800	2350	2540	970	1530	1180	1400
31	2540	---	3700	4800	---	14100	---	2280	---	1500	818	---
TOTAL	229520	144280	211950	258400	60780	184350	255420	124660	52440	40496	42365	32082
MEAN	7404	4809	6837	8335	2171	5947	8514	4021	1748	1306	1367	1069
MAX	22200	14200	13300	33200	6280	20400	18600	10000	3430	3530	3350	1440
MIN	2540	1760	2430	2100	1200	980	2350	1450	970	908	818	646

CAL YR 1977 TOTAL 1614386 MEAN 4423 MAX 54600 MIN 356
WTR YR 1978 TOTAL 1636743 MEAN 4484 MAX 33200 MIN 646

01428500 DELAWARE RIVER ABOVE LACKAWAXEN RIVER NEAR BARRYVILLE, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1968 to current year.
CHEMICAL DATA: 1971-73 (a).
NUTRIENT DATA: 1971 (a).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1967 to current year (no record for winter months each year except water years 1968, 1977, and 1978).

INSTRUMENTATION.--Temperature recorder since October 1967.

REMARKS.--No record Oct. 1 to Jan. 6, July 15 to Sept. 30, due to instrument malfunctions.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum (water years 1968-75), 32.0°C Aug. 2, 3 1975; minimum (water years 1968, 1977, 1978), freezing point on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Minimum, freezing point on many days during winter period.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1										---	---	---
2										---	---	---
3										---	---	---
4										---	---	---
5										---	---	---
6										---	---	---
7										.5	.0	.5
8										1.5	.5	.5
9										2.0	.5	1.0
10										.5	.5	.5
11										1.0	.5	.5
12										1.0	.5	.5
13										1.0	.5	.5
14										.5	.5	.5
15										.5	.5	.5
16										.5	.0	.5
17										.5	.5	.5
18										.5	.0	.5
19										.5	.5	.5
20										.5	.5	.5
21										.5	.5	.5
22										.5	.0	.5
23										.5	.0	.5
24										.5	.0	.5
25										.5	.5	.5
26										1.0	.5	.5
27										.5	.5	.5
28										.5	.0	.5
29										.5	.0	.5
30										.5	.0	.0
31										.5	.0	.0
MONTH										2.0	.0	.5

01428500 DELAWARE RIVER ABOVE LACKAWAXEN RIVER NEAR BARRYVILLE, NY--Continued

TEMPERATURE (DEG. C) OF WATER. WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	.5	.0	.0	.5	.0	.5	6.0	4.5	5.0	12.5	10.0	11.0
2	.5	.0	.0	.5	.0	.5	5.5	4.5	5.0	13.5	9.0	11.0
3	.5	.0	.0	.5	.0	.0	4.0	2.5	3.5	14.5	10.0	12.0
4	.5	.0	.0	.5	.0	.5	3.5	2.5	3.0	14.0	10.5	12.5
5	.5	.0	.0	.5	.0	.5	4.0	3.0	3.5	12.0	11.0	11.0
6	.5	.0	.0	.5	.0	.5	5.0	3.5	4.5	10.5	9.5	10.0
7	.5	.0	.5	.5	.0	.5	6.0	5.0	5.5	11.5	9.5	10.5
8	.5	.0	.5	.5	.0	.0	5.5	4.5	5.5	13.0	10.0	11.5
9	.5	.0	.0	.5	.0	.5	5.0	3.5	4.5	14.5	11.5	13.0
10	.5	.0	.0	.5	.0	.0	6.5	4.5	5.5	13.5	13.0	13.5
11	.5	.0	.5	.5	.0	.5	7.5	6.0	7.0	15.5	12.5	14.0
12	.5	.0	.0	1.0	.0	.5	9.0	7.0	8.0	16.0	14.5	15.0
13	1.0	.0	.5	2.0	.0	1.0	9.0	7.5	8.0	15.0	14.5	15.0
14	.5	.0	.0	1.0	.5	.5	8.0	7.0	7.5	14.5	14.0	14.0
15	1.0	.0	.5	.5	.0	.5	6.5	5.5	6.0	13.5	13.0	13.5
16	.5	.0	.5	.5	.0	.5	6.5	5.0	6.0	13.0	13.0	13.0
17	1.0	.0	.5	1.5	.0	.5	7.5	6.0	6.5	13.0	12.5	13.0
18	.5	.0	.0	1.5	.0	.5	8.5	6.5	7.5	12.5	12.0	12.5
19	1.0	.0	.5	2.0	.0	1.0	8.5	7.5	8.0	15.0	12.5	13.5
20	.5	.0	.5	2.0	.0	1.0	8.0	7.5	7.5	17.0	14.5	16.0
21	.5	.0	.0	2.5	.0	1.0	7.5	7.0	7.0	17.5	16.0	17.0
22	.5	.0	.0	1.0	.5	.5	9.0	6.5	7.5	17.0	15.0	16.0
23	.5	.0	.5	3.5	1.0	2.5	10.0	7.5	9.0	16.5	15.0	16.0
24	.5	.0	.0	3.5	3.0	3.0	11.0	9.0	10.0	16.5	15.5	16.0
25	.5	.0	.0	3.0	2.0	2.5	12.0	10.0	11.0	16.5	15.0	15.5
26	.5	.0	.5	2.0	1.5	1.5	12.5	11.0	12.0	19.5	16.5	18.0
27	.5	.0	.0	2.5	1.5	2.0	12.5	11.5	12.0	21.5	19.5	20.5
28	.5	.0	.5	3.5	2.0	3.0	14.0	11.5	12.5	23.0	21.0	22.0
29	---	---	---	4.5	3.5	4.0	14.5	12.0	13.0	25.0	22.0	23.5
30	---	---	---	4.5	3.0	4.0	14.5	11.5	13.0	26.0	22.5	24.0
31	---	---	---	5.0	3.5	4.5	---	---	---	26.0	20.5	25.0
MONTH	1.0	.0	.0	5.0	.0	1.0	14.5	2.5	7.5	26.0	9.0	15.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	26.5	24.5	25.0	27.5	23.0	25.5						
2	27.0	23.5	25.0	27.0	22.5	25.0						
3	24.5	23.0	24.0	24.5	21.5	23.0						
4	24.0	21.0	22.5	22.0	20.0	21.0						
5	22.5	20.0	21.0	20.5	19.0	20.0						
6	24.0	15.5	21.0	24.0	20.0	22.0						
7	21.5	20.0	21.0	27.5	22.0	24.5						
8	22.0	20.5	21.0	29.0	24.5	26.5						
9	22.0	20.5	21.0	30.5	26.5	28.5						
10	22.5	20.0	21.0	31.0	27.0	29.0						
11	24.0	20.5	22.0	28.0	25.0	27.0						
12	26.0	22.0	24.0	28.0	23.0	25.5						
13	24.5	21.0	23.5	28.5	23.5	26.0						
14	21.5	19.5	20.5	27.5	25.0	26.0						
15	22.0	18.0	20.0	---	---	---						
16	23.0	18.5	20.5	---	---	---						
17	21.0	19.5	20.0	---	---	---						
18	23.0	19.0	21.0	---	---	---						
19	27.0	21.5	24.0	---	---	---						
20	28.0	23.0	25.5	---	---	---						
21	28.0	24.5	26.0	---	---	---						
22	27.5	24.5	26.0	---	---	---						
23	27.0	24.0	25.5	---	---	---						
24	27.5	23.0	25.0	---	---	---						
25	27.5	23.0	25.5	---	---	---						
26	25.5	24.0	24.5	---	---	---						
27	29.0	23.5	26.0	---	---	---						
28	29.5	25.5	27.5	---	---	---						
29	29.5	25.0	27.5	---	---	---						
30	29.5	25.0	27.0	---	---	---						
31	---	---	---	---	---	---						
MONTH	29.5	15.5	23.5	31.0	19.0	25.0						

01432160 DELAWARE RIVER AT BARRYVILLE, NY

LOCATION.--Lat 41°28'31", long 74°54'46", Pike County, Pa. Hydrologic Unit 02040104, at Shohola-Barryville Bridge at Barryville, just upstream from Halfway Brook, and 1,000 ft (305 m) upstream from Shohola Brook.

DRAINAGE AREA.--2,692 mi² (6,972 km²).

PERIOD OF RECORD.--Water years 1958, 1968 to current year.
CHEMICAL DATA: 1958 (d), 1969 (a), 1973 (b), 1974 (d), 1975 (b).
NUTRIENT DATA: 1973 (b), 1974 (d), 1975 (b).
BIOLOGICAL DATA:
Coliform bacteria.--1973 (b), 1974 (d), 1975 (b).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1967 to September 1973, March 1975 to current year.

INSTRUMENTATION.--Temperature recorder since October 1967.

REMARKS.--Unpublished records of daily temperatures for May to September 1964-66 are available in files of the Geological Survey. Temperature probe may be influenced by solar radiation during periods of low flow. No record Dec. 6 to Jan. 6, Apr. 13 to May 17, June 28 to Aug. 14, Sept. 23-30, due to instrument malfunctions.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum (water years 1968-73, 1976-78), 31.0°C July 16, 1977; minimum, freezing point on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum recorded, 29.0°C Aug. 15, 16, minimum, freezing point on many days during winter period.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	17.5	15.0	15.5	12.0	9.0	11.0	5.0	4.5	4.5	---	---	---
2	17.5	16.5	17.0	13.0	10.0	11.5	5.5	5.0	5.5	---	---	---
3	16.5	15.5	16.0	14.0	12.5	13.0	5.5	4.0	5.0	---	---	---
4	15.5	13.0	14.5	15.5	14.0	14.5	5.5	4.0	4.0	---	---	---
5	16.0	12.0	14.0	16.0	15.5	15.5	4.0	2.5	3.0	---	---	---
6	15.5	12.5	14.0	15.5	15.0	15.5	---	---	---	---	---	---
7	15.0	12.0	13.5	15.0	12.0	14.5	---	---	---	1.0	.5	.5
8	13.0	12.0	12.5	12.0	11.5	12.0	---	---	---	2.0	.5	1.0
9	13.5	13.0	13.0	12.5	12.0	12.0	---	---	---	2.5	.0	1.0
10	14.5	13.5	14.0	13.0	12.5	13.0	---	---	---	.0	.0	.0
11	15.0	13.0	14.0	13.0	10.5	12.0	---	---	---	.5	.0	.5
12	15.0	13.5	14.0	10.0	7.5	8.5	---	---	---	1.0	.5	1.0
13	14.0	12.5	13.5	7.5	6.5	7.0	---	---	---	1.0	.5	1.0
14	13.5	12.0	12.5	6.5	5.5	6.0	---	---	---	.5	.5	.5
15	12.5	10.0	11.5	6.5	5.5	6.0	---	---	---	.5	.0	.5
16	11.5	9.5	11.0	8.0	6.5	7.5	---	---	---	.5	.0	.0
17	11.5	10.0	11.0	9.0	8.0	8.5	---	---	---	.0	.0	.0
18	10.0	8.0	9.5	9.0	7.5	8.0	---	---	---	.0	.0	.0
19	10.5	9.5	10.0	7.5	6.5	7.0	---	---	---	.0	.0	.0
20	11.5	10.5	11.0	6.0	5.5	6.0	---	---	---	.0	.0	.0
21	12.0	11.0	11.5	6.5	6.0	6.0	---	---	---	.0	.0	.0
22	13.0	12.0	12.5	6.5	6.0	6.5	---	---	---	.0	.0	.0
23	12.5	11.5	12.0	6.0	6.0	6.0	---	---	---	.0	.0	.0
24	11.5	9.0	11.0	6.5	6.0	6.0	---	---	---	.0	.0	.0
25	12.5	11.0	11.5	6.0	5.5	5.5	---	---	---	1.0	.0	.5
26	13.0	12.0	12.0	5.5	3.5	4.5	---	---	---	1.5	.0	1.0
27	14.0	13.0	13.5	3.0	2.0	2.5	---	---	---	.0	.0	.0
28	14.5	14.0	14.5	2.0	2.0	2.0	---	---	---	.5	.0	.5
29	14.0	12.0	13.5	3.5	1.5	2.5	---	---	---	.5	.0	.5
30	13.0	11.5	12.5	4.5	3.5	4.0	---	---	---	.5	.0	.0
31	12.0	10.0	11.0	---	---	---	---	---	---	.0	.0	.0
MONTH	17.5	8.0	13.0	16.0	1.5	8.5	5.5	2.5	4.5	2.5	.0	.5

01432160 DELAWARE RIVER AT BARRYVILLE, NY--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	1.0	.0	.0	1.5	.0	.5	5.5	4.5	5.0	---	---	---
2	.5	.0	.5	1.5	.0	.5	5.5	5.0	5.0	---	---	---
3	.5	.0	.0	1.0	.0	.5	5.0	3.5	4.0	---	---	---
4	.5	.0	.0	1.0	.0	.5	3.5	3.0	3.0	---	---	---
5	.0	.0	.0	1.0	.0	.5	4.0	3.5	3.5	---	---	---
6	.0	.0	.0	.5	.0	.5	5.0	3.5	4.0	---	---	---
7	.5	.0	.0	1.5	.0	.5	6.0	5.0	5.0	---	---	---
8	1.0	.0	.5	1.5	.0	.5	6.0	5.0	5.5	---	---	---
9	1.0	.0	.5	3.0	.0	1.0	5.5	3.5	4.5	---	---	---
10	1.0	.0	.5	2.0	.5	1.0	6.0	4.5	5.0	---	---	---
11	.5	.0	.5	3.0	.5	1.5	7.0	5.5	6.5	---	---	---
12	.5	.0	.5	4.0	1.0	2.0	8.5	6.0	7.0	---	---	---
13	1.5	.0	.5	3.5	.5	1.5	---	---	---	---	---	---
14	1.0	.0	.5	2.0	1.0	1.5	---	---	---	---	---	---
15	1.0	.0	.5	1.5	1.0	1.0	---	---	---	---	---	---
16	1.5	.0	.5	1.0	.5	.5	---	---	---	---	---	---
17	1.5	1.0	1.5	2.0	.0	1.0	---	---	---	---	---	---
18	1.0	.5	.5	1.5	.0	1.0	---	---	---	12.0	11.0	11.5
19	.5	.0	.5	3.0	.5	1.5	---	---	---	14.5	11.5	13.0
20	.5	.0	.0	3.0	1.0	2.0	---	---	---	16.0	13.0	14.5
21	.5	.0	.5	4.0	1.0	2.5	---	---	---	16.5	15.0	15.5
22	.5	.0	.5	3.5	1.0	2.0	---	---	---	16.0	14.0	15.0
23	1.0	.0	.5	3.5	1.0	2.0	---	---	---	16.0	14.0	15.0
24	1.0	.5	.5	3.5	2.5	3.0	---	---	---	15.5	14.0	15.0
25	1.0	.5	.5	3.0	2.0	2.5	---	---	---	15.5	13.5	14.5
26	1.5	.0	.5	2.5	1.5	1.5	---	---	---	18.5	15.0	16.5
27	1.0	.0	.5	2.5	1.5	2.0	---	---	---	21.0	17.5	19.0
28	1.5	.0	.5	3.5	2.0	2.5	---	---	---	22.0	19.5	20.5
29	---	---	---	4.5	3.0	3.5	---	---	---	23.5	20.5	22.0
30	---	---	---	4.0	3.0	3.5	---	---	---	23.0	21.0	22.0
31	---	---	---	5.0	3.5	4.0	---	---	---	23.5	21.0	22.0
MONTH	1.5	.0	.5	5.0	.0	1.5	8.5	3.0	5.0	23.5	11.0	17.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	23.0	21.5	22.0				---	---	---	19.5	17.5	18.5
2	23.5	21.0	22.0				---	---	---	20.5	18.0	19.0
3	22.0	21.5	21.5				---	---	---	23.0	16.5	19.0
4	21.5	19.0	20.5				---	---	---	20.5	16.5	18.0
5	20.5	18.0	19.0				---	---	---	18.0	17.0	17.5
6	20.5	16.5	18.5				---	---	---	18.5	17.0	17.5
7	19.5	17.0	18.0				---	---	---	19.0	16.5	17.5
8	19.5	17.0	18.0				---	---	---	18.0	17.5	18.0
9	20.0	17.5	18.5				---	---	---	18.0	17.0	17.5
10	21.0	17.5	20.0				---	---	---	18.5	16.5	17.5
11	22.5	19.0	21.0				---	---	---	21.5	18.0	19.0
12	23.5	20.0	22.0				---	---	---	20.0	19.0	19.5
13	21.5	18.0	20.0				---	---	---	21.0	15.0	17.5
14	19.0	17.0	18.0				---	---	---	22.0	15.5	18.0
15	19.0	16.0	17.5				29.0	24.5	26.0	20.5	16.0	17.5
16	19.5	16.5	18.0				29.0	23.0	26.0	20.5	13.0	16.0
17	18.5	18.0	18.0				27.5	25.0	26.5	18.0	14.5	16.5
18	21.5	17.5	19.5				26.0	23.5	25.0	17.0	15.5	16.0
19	24.0	20.5	22.0				24.5	21.0	22.0	16.0	13.5	15.0
20	25.0	21.0	23.0				25.0	20.5	23.0	15.5	13.5	14.5
21	25.0	22.0	23.5				23.0	20.5	21.5	16.5	14.5	15.5
22	25.5	22.5	23.5				22.0	19.5	20.5	16.0	14.5	15.0
23	25.0	22.0	23.5				23.0	20.0	21.5	---	---	---
24	25.0	21.0	23.0				24.0	20.5	22.0	---	---	---
25	25.5	21.0	23.0				23.5	20.5	21.5	---	---	---
26	25.5	22.0	23.0				24.5	19.5	21.5	---	---	---
27	27.5	21.0	24.0				25.5	20.0	22.5	---	---	---
28	---	---	---				24.5	21.5	23.0	---	---	---
29	---	---	---				23.0	19.5	21.0	---	---	---
30	---	---	---				20.5	18.0	19.0	---	---	---
31	---	---	---				19.5	17.5	18.5	---	---	---
MONTH	27.5	16.0	21.0				29.0	17.5	22.5	23.0	13.0	17.5

01432805 DELAWARE RIVER AT POND EDDY, NY

LOCATION.--Lat 41°26'20", long 74°49'11", Pike County, Pa. Hydrologic Unit 02040104, at interstate bridge, at Pond Eddy, 450 ft (137 m) downstream from Mill Brook and 4.5 mi (7.2 km) upstream from Mongaup River.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1973 to current year.

INSTRUMENTATION.--Temperature recorder since October 1973.

REMARKS.--Temperature probe may be influenced by solar radiation during periods of low flow. No record Aug. 14 to Sept. 30, due to instrument malfunction.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum (water years 1976, 1978) 28.5°C June 26, 27, 28, 1976 and July 23, 24, 1978; minimum (water years 1974, 1977-78), freezing point on many days during winter periods, except 1978.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum recorded, 28.5°C July 23, 24; minimum, 0.5°C on many days.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	15.5	15.0	15.5	10.5	9.0	10.0	5.0	4.0	4.5	1.0	1.0	1.0
2	15.5	14.5	15.0	11.0	10.0	10.5	5.5	5.0	5.5	1.0	1.0	1.0
3	14.5	14.0	14.5	12.0	11.0	11.0	6.0	5.5	5.5	1.0	1.0	1.0
4	14.0	13.0	13.5	13.5	12.0	13.0	6.0	5.5	5.5	1.0	1.0	1.0
5	14.0	12.5	13.0	14.5	13.5	14.0	5.5	3.5	4.5	1.0	1.0	1.0
6	14.0	13.0	13.0	14.5	13.5	14.0	4.0	3.5	3.5	1.0	1.0	1.0
7	13.5	12.5	13.0	14.0	13.0	13.5	3.5	2.5	3.0	1.5	1.0	1.0
8	13.0	11.5	12.0	12.5	12.0	12.0	2.5	1.5	2.0	2.5	1.0	1.5
9	12.0	11.0	11.5	12.5	11.5	12.0	2.0	1.5	2.0	3.5	1.5	2.5
10	12.5	11.5	12.0	13.0	12.5	12.5	1.5	1.0	1.0	1.5	1.0	1.5
11	12.5	11.5	12.0	13.0	10.5	11.5	1.0	1.0	1.0	1.5	1.0	1.5
12	13.0	12.0	12.5	10.5	8.5	9.0	1.0	1.0	1.0	1.5	1.0	1.0
13	12.5	11.5	12.0	8.5	7.0	8.0	1.0	1.0	1.0	1.5	1.0	1.5
14	12.0	11.0	11.5	7.0	6.5	7.0	1.5	1.0	1.5	1.0	1.0	1.0
15	11.0	10.0	10.5	7.5	6.5	7.0	2.0	1.5	1.5	1.0	1.0	1.0
16	10.5	9.5	10.0	9.0	7.5	8.0	3.0	1.5	2.5	1.0	1.0	1.0
17	10.5	9.5	10.5	10.0	9.0	9.5	4.0	3.0	3.5	1.0	1.0	1.0
18	9.5	8.5	9.0	9.5	8.5	9.0	4.0	3.0	3.5	1.5	1.0	1.0
19	10.5	9.5	10.0	8.5	7.5	8.0	3.5	3.0	3.5	1.0	1.0	1.0
20	11.0	10.0	10.5	7.5	6.5	7.0	4.0	3.5	3.5	1.0	1.0	1.0
21	11.5	10.0	11.0	7.5	6.5	7.0	4.0	3.5	4.0	1.0	1.0	1.0
22	12.0	10.5	11.0	8.0	7.0	7.5	4.0	3.0	3.5	1.0	1.0	1.0
23	11.5	10.5	11.0	7.5	7.0	7.0	3.0	2.5	3.0	1.0	1.0	1.0
24	11.0	9.5	10.0	7.5	6.5	7.0	3.0	2.5	2.5	1.0	1.0	1.0
25	11.0	9.5	10.0	7.5	6.5	7.0	4.0	3.0	3.5	1.5	1.0	1.0
26	11.0	10.0	10.5	6.5	5.0	6.0	3.5	2.0	2.5	2.0	1.5	1.5
27	13.0	11.0	11.5	5.0	3.0	4.0	1.5	1.0	1.5	1.5	1.0	1.5
28	13.5	12.5	13.0	3.0	2.5	3.0	1.0	1.0	1.0	1.5	1.0	1.5
29	13.5	12.5	13.0	3.0	2.5	2.5	1.0	1.0	1.0	1.5	1.0	1.0
30	13.0	11.0	11.5	4.0	3.0	3.0	1.0	1.0	1.0	1.0	1.0	1.0
31	11.5	9.5	10.5	---	---	---	1.0	1.0	1.0	1.0	1.0	1.0
MONTH	15.5	8.5	12.0	14.5	2.5	8.5	6.0	1.0	2.5	3.5	1.0	1.0

01432805 DELAWARE RIVER AT POND EDDY, NY--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	1.0	1.0	1.0	1.0	.5	1.0	6.0	5.0	5.5	12.0	10.5	11.0
2	1.0	1.0	1.0	1.5	.5	1.0	6.0	5.0	5.5	12.0	10.0	11.0
3	1.0	1.0	1.0	1.0	.5	1.0	5.0	4.0	4.5	13.0	11.0	12.0
4	1.0	1.0	1.0	1.0	.5	1.0	4.5	3.0	4.0	13.0	11.5	12.5
5	1.0	1.0	1.0	1.0	.5	1.0	5.0	4.0	4.5	12.0	10.5	11.0
6	1.0	1.0	1.0	1.0	.5	1.0	5.5	4.5	5.0	10.0	10.0	10.0
7	1.0	1.0	1.0	1.0	.5	1.0	6.5	5.5	6.0	11.5	10.0	10.5
8	1.0	1.0	1.0	1.0	.5	.5	6.0	5.0	5.5	12.0	11.0	11.5
9	1.0	1.0	1.0	1.0	.5	.5	5.5	4.0	5.0	15.0	12.0	13.5
10	1.0	1.0	1.0	1.0	.5	1.0	6.5	5.0	5.5	14.5	13.0	14.0
11	1.0	1.0	1.0	1.5	.5	1.0	7.5	6.0	7.0	15.5	13.0	14.0
12	1.0	1.0	1.0	2.0	1.0	1.5	8.5	7.0	8.0	16.0	14.0	15.0
13	1.0	1.0	1.0	2.5	1.0	1.5	9.0	7.5	8.5	15.5	14.5	15.0
14	1.0	1.0	1.0	2.0	1.5	2.0	8.5	7.0	7.5	15.0	14.5	14.5
15	1.0	1.0	1.0	2.0	1.5	1.5	7.0	6.0	6.5	14.0	13.0	13.5
16	1.0	1.0	1.0	1.5	1.0	1.0	6.5	5.5	6.0	13.0	12.5	13.0
17	1.0	1.0	1.0	2.0	1.0	1.5	7.0	6.5	6.5	13.0	12.5	13.0
18	1.0	1.0	1.0	2.0	.5	1.5	9.0	6.5	7.5	13.0	12.5	13.0
19	1.5	1.0	1.0	3.0	1.0	1.5	8.5	8.0	8.0	15.0	13.0	14.0
20	1.0	1.0	1.0	3.0	1.0	2.0	8.5	8.0	8.5	16.5	14.5	15.5
21	1.0	1.0	1.0	4.0	1.5	2.5	8.5	7.5	8.0	17.5	16.5	17.0
22	1.0	1.0	1.0	3.5	1.5	2.0	9.0	7.0	8.0	17.0	15.5	16.0
23	1.0	1.0	1.0	3.5	1.5	2.5	10.0	8.0	9.0	17.0	15.0	16.0
24	1.0	1.0	1.0	4.0	3.0	3.5	11.0	9.0	10.0	16.5	15.5	16.0
25	1.0	1.0	1.0	3.5	2.5	3.0	12.0	9.0	10.5	17.0	15.0	16.0
26	1.5	.5	1.0	2.5	2.0	2.0	13.0	10.5	12.0	19.0	15.5	17.5
27	1.0	.5	1.0	3.0	2.0	2.5	12.5	11.0	11.5	21.5	18.0	20.0
28	1.0	.5	1.0	4.0	2.5	3.0	13.5	11.0	12.0	23.0	20.5	21.5
29	---	---	---	5.0	3.5	4.0	13.5	11.5	13.0	24.5	21.5	23.0
30	---	---	---	4.5	3.5	4.0	13.5	12.0	13.0	24.5	22.5	23.5
31	---	---	---	5.5	4.0	4.5	---	---	---	24.0	22.0	23.0
MONTH	1.5	.5	1.0	5.5	.5	2.0	13.5	3.0	7.5	24.5	10.0	15.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	24.0	22.0	23.0	24.0	21.5	22.5	18.0	15.5	17.0			
2	23.5	21.5	22.5	24.0	20.0	22.0	21.5	17.0	19.0			
3	22.5	21.0	22.0	22.0	19.5	21.0	24.0	19.5	21.5			
4	21.5	20.0	21.0	19.5	18.0	19.0	24.0	22.0	22.5			
5	21.0	19.5	20.0	19.5	17.5	18.5	22.0	21.0	21.5			
6	20.5	17.5	19.0	21.5	18.0	19.5	22.0	20.5	21.0			
7	20.0	18.0	18.5	24.0	19.5	21.5	21.0	20.0	21.0			
8	20.0	18.0	19.0	26.0	21.5	23.5	21.0	19.0	20.0			
9	20.5	19.0	20.0	28.0	24.0	25.5	21.5	20.0	21.0			
10	21.5	18.0	19.5	28.0	25.0	26.5	22.5	20.0	21.0			
11	22.5	19.5	21.0	26.0	22.0	23.5	21.0	20.0	20.5			
12	24.0	21.0	22.5	24.0	19.0	21.5	21.0	19.5	20.0			
13	23.5	20.0	22.0	24.5	19.5	22.0	23.5	20.5	21.5			
14	19.5	17.5	18.5	22.5	20.5	21.5	---	---	---			
15	19.5	17.0	18.0	25.0	20.5	22.5	---	---	---			
16	19.5	17.5	18.5	25.0	23.5	24.0	---	---	---			
17	19.0	18.0	18.5	24.5	23.0	23.5	---	---	---			
18	22.0	18.0	19.5	25.0	20.0	22.5	---	---	---			
19	25.0	21.0	22.5	25.5	21.0	23.0	---	---	---			
20	25.5	21.5	23.5	25.5	22.0	24.0	---	---	---			
21	25.5	23.5	24.5	25.5	22.0	23.5	---	---	---			
22	26.0	23.5	24.5	26.0	23.0	24.5	---	---	---			
23	24.5	22.5	23.5	28.5	25.5	26.5	---	---	---			
24	25.0	21.5	23.0	28.5	25.0	26.5	---	---	---			
25	25.5	21.5	23.0	25.0	22.0	23.5	---	---	---			
26	23.5	22.5	23.0	22.5	21.5	22.0	---	---	---			
27	27.0	21.5	24.0	23.5	21.0	22.0	---	---	---			
28	27.0	24.5	25.5	24.5	22.0	22.5	---	---	---			
29	27.0	24.0	25.0	22.5	20.5	21.5	---	---	---			
30	26.0	23.5	24.5	21.5	20.0	20.5	---	---	---			
31	---	---	---	20.0	16.5	18.0	---	---	---			
MONTH	27.0	17.0	21.5	28.5	16.5	22.5	24.0	15.5	20.5			

01433500 MONGAUP RIVER NEAR MONGAUP, NY

LOCATION.--Lat 41°27'41", long 74°45'33", Sullivan County, Hydrologic Unit 02040104, on right bank 300 ft (91 m) downstream from Rio hydroelectric plant of Orange and Rockland Utilities, Inc., 0.5 mi (0.8 km) downstream from Bush Kill, and 2.8 mi (4.5 km) upstream from mouth and Mongaup.

DRAINAGE AREA.--202 mi² (523 km²).

PERIOD OF RECORD.--August 1939 to current year.

REVISED RECORDS.--WRD NY 1971: 1970.

GAGE.--Water-stage recorder. Datum of gage is 625.05 ft (190.515 m) Orange and Rockland Utilities, Inc. datum. Prior to July 6, 1956, water-stage recorders at sites 25 ft (8 m) upstream on Rio Tailrace and 200 ft (61 m) upstream on natural channel, at datum 4.0 ft (1.22 m) higher.

REMARKS.--Records good above 70 ft³/s (1.98 m³/s) and fair below. Entire flow completely regulated by Rio hydroelectric plant except for runoff from about 7 mi² (11 km²) of drainage area below Rio Dam of Orange and Rockland Utilities, Inc., and during periods of spill from Rio Reservoir. Flow also regulated by storage in Cliff Lake, Swinging Bridge, and Toronto Reservoirs (see Reservoirs in Delaware River Basin) and small reservoirs above station.

AVERAGE DISCHARGE.--39 years, 341 ft³/s (9.66 m³/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,900 ft³/s (450 m³/s) Aug. 19, 1955; maximum daily, 12,300 ft³/s (348 m³/s), Aug. 19, 1955; minimum daily, 6 ft³/s (0.17 m³/s) Oct. 1, 1939.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,930 ft³/s (54.7 m³/s) Apr. 2, gage height, 6.10 ft (1.859 m); minimum daily, 14 ft³/s (0.40 m³/s) Aug. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	607	409	567	39	761	378	984	401	401	24	22	22
2	714	368	564	38	761	380	1510	174	401	24	366	20
3	706	589	717	509	757	532	1740	144	393	24	22	20
4	465	515	729	536	725	706	1320	168	408	28	335	19
5	351	497	687	436	725	702	1020	476	401	203	21	191
6	500	691	668	401	725	698	1010	301	393	26	22	124
7	550	695	725	403	725	698	1170	33	393	147	393	69
8	473	721	717	125	725	327	1170	30	476	24	368	20
9	630	714	717	886	721	275	1130	267	726	24	406	19
10	710	491	393	1230	721	380	1100	431	729	41	703	19
11	356	482	33	842	626	380	1080	520	726	23	476	19
12	422	485	445	745	714	339	846	705	699	23	23	76
13	479	488	717	753	714	409	718	695	722	23	25	86
14	710	431	522	741	714	710	714	413	718	23	386	164
15	729	468	733	737	714	721	714	753	714	26	59	208
16	721	433	725	729	672	714	710	741	517	23	261	20
17	578	318	539	729	710	390	718	753	403	24	24	126
18	615	433	725	729	710	390	718	838	401	23	23	219
19	615	482	653	725	710	388	714	1720	584	23	20	120
20	725	509	721	725	710	536	691	1610	398	165	14	224
21	714	470	725	725	710	714	461	1210	310	24	18	324
22	567	428	729	641	706	729	455	1010	249	22	21	452
23	714	447	725	721	706	737	388	737	261	22	21	20
24	714	373	679	721	706	745	388	729	29	29	21	19
25	660	417	615	721	385	741	527	733	27	25	21	356
26	714	47	575	769	383	737	458	729	317	22	21	19
27	714	39	571	757	383	785	464	726	77	22	21	18
28	710	473	721	745	380	797	524	722	86	170	21	17
29	653	479	721	741	---	793	492	718	26	21	173	17
30	546	714	611	761	---	805	473	714	25	22	19	19
31	459	---	560	777	---	950	---	591	---	22	22	---
TOTAL	18821	14106	19529	20137	18699	18586	24407	19793	12010	1342	4348	3046
MEAN	607	470	630	650	668	600	814	638	400	43.3	140	102
MAX	729	721	733	1230	761	950	1740	1720	729	203	703	452
MIN	351	39	33	38	380	275	388	30	25	21	14	17

CAL YR 1977 TOTAL 155058 MEAN 425 MAX 4190 MIN 19
WTR YR 1978 TOTAL 174824 MEAN 479 MAX 1740 MIN 14

01434000 DELAWARE RIVER AT PORT JERVIS, NY

LOCATION.--Lat 41°22'14", long 74°41'52", Pike County, Pa., Hydrologic Unit 02040104, on right bank 250 ft (76 m) downstream from bridge (on U.S. Highways 6 and 209) between Port Jervis, N.Y. and Matamoras, Pa., 1.2 mi (1.9 km) upstream from Neversink River, and 6.5 mi (10.5 km) downstream from Mongaup River. Water-quality sampling site at discharge station.

DRAINAGE AREA.--3,076 mi² (7,967 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1904 to current year.

REVISED RECORDS.--WSP 756: Drainage area. WSP 1031: 1905-36. WRD NY 1971: 1970.

GAGE.--Water-stage recorder. Datum of gage is 415.35 ft (126.599 m) National Geodetic Vertical Datum of 1929. October 1904 to August 13, 1928, nonrecording gage at bridge 250 ft upstream at present datum; operated by U.S. Weather Bureau prior to June 20, 1914.

REMARKS.--Records good. Flow regulated by Lake Wallenpaupack and by Toronto, Cliff Lake, and Swinging Bridge Reservoirs (see Reservoirs in Delaware River Basin) and smaller reservoirs. Large diurnal fluctuations at medium and low flows caused by powerplants on tributary streams. Subsequent to September 1954, entire flow from 371 mi² (961 km²) of drainage area controlled by Pepacton Reservoir, and subsequent to October 1963, entire flow from 454 mi² (1,176 km²) of drainage area controlled by Cannonsville Reservoir (see Reservoirs in Delaware River Basin). Part of flow from these reservoirs diverted for New York City municipal supply. Remainder of flow (except for conservation releases and spill) impounded for release during periods of low flow in the lower Delaware River basin, as directed by the Delaware River Master.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 233,000 ft³/s (6,600 m³/s) Aug. 19, 1955, gage height, 23.91 ft (7.288 m), from floodmarks in gage house, from rating curve extended above 89,000 ft³/s (2,520 m³/s) on basis of slope-area measurement of peak flow; minimum observed, 175 ft³/s (4.96 m³/s) Sept. 23, 1908, gage height, 0.6 ft (0.18 m).

EXTREMES OUTSIDE PERIOD OF RECORD.--The U.S. Weather Bureau reported a discharge of 205,000 ft³/s (5,810 m³/s) Oct. 10, 1903, gage height, 23.1 ft (7.04 m), from rating curve extended above 70,000 ft³/s (1,980 m³/s) by velocity-area studies; stage on Mar. 8, 1904, was 25.5 ft (7.77 m), ice jam.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 62,400 ft³/s (1,770 m³/s) Jan. 9, gage height, 12.44 ft (3.792 m); minimum, 664 ft³/s (18.8 m³/s) Sept. 26, gage height, 1.64 ft (0.500 m); minimum daily, 995 ft³/s (28.2 m³/s) Sept. 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5940	4050	8500	5220	10800	2600	19500	3090	3900	1340	1780	1450
2	15000	3730	16400	5150	9100	2500	24700	2700	3760	1270	1350	1420
3	13800	3760	16700	5390	8710	2500	23100	2380	3230	1250	1330	1350
4	9750	3290	14600	4920	7610	2820	19000	2130	3480	1250	1650	1260
5	7020	2890	12500	4700	6230	2110	18000	2480	3480	3970	1530	1370
6	5870	3140	11200	4730	5910	2530	18300	3650	3590	3280	1910	1390
7	5770	3650	10100	4920	5150	3180	18100	3560	3340	2500	3580	1410
8	4570	6270	8970	4350	6120	2400	20200	3310	3820	1880	3750	1410
9	5020	10900	8090	35200	6270	2150	17900	3560	5980	1490	3280	1450
10	12100	10400	7210	43500	5730	2290	15100	5940	5660	1590	2880	1540
11	9620	15600	5700	27600	4920	2150	12900	5980	4350	1700	2320	1390
12	7290	18100	4950	18800	4200	2000	14200	5120	3960	1690	1740	1590
13	5870	14600	5120	14900	4170	2020	15100	4540	3950	1600	1580	1260
14	5350	11600	6160	13000	4760	3180	14000	4140	4060	1470	2140	1410
15	7170	9660	12600	11500	4510	5390	11500	6680	3820	1530	1750	1460
16	10900	8300	17700	9620	4600	8840	9360	7690	3160	1470	1640	1480
17	15800	7210	15400	7100	4510	8220	8500	10800	2530	1490	1310	1560
18	29600	7410	13300	6450	3990	6870	7930	14600	2160	1670	1240	1720
19	21800	6900	11900	6340	3210	5940	6340	17900	2530	1750	1270	2520
20	22300	6160	10500	5420	3210	6490	6410	15500	2410	1680	1250	2170
21	19700	5520	10100	5020	3760	7170	7650	13100	2250	2110	1230	1690
22	15500	5150	11900	4850	3700	14600	7290	11400	2070	2020	1360	1670
23	12800	4950	10400	4510	3850	18200	6230	9230	2420	1660	1460	1120
24	10700	4570	8670	5700	3530	20700	5910	7970	2010	1520	1360	1030
25	9230	4380	7730	6090	2890	16800	5290	9440	1520	1560	1540	1190
26	7730	5020	10700	16000	2170	13500	4630	7930	1740	1380	1570	995
27	7130	6340	9890	40400	2200	18100	4290	6230	1530	1420	1600	1310
28	6270	5560	9010	27200	2800	30900	3990	5350	1760	1740	1480	1410
29	5220	5020	7730	19200	---	26800	3670	4760	1520	1390	1600	1420
30	4440	4920	6940	15000	---	24200	3400	4570	1420	1490	1690	1610
31	4260	---	6490	12600	---	20800	---	4290	---	1810	1320	---
TOTAL	323520	209050	317160	395390	138610	287950	352490	210020	91410	53970	55490	44055
MEAN	10440	6968	10230	12750	4950	9289	11750	6775	3047	1741	1790	1469
MAX	29600	18100	17700	43500	10800	30900	24700	17900	5980	3970	3750	2520
MIN	4260	2890	4950	4350	2170	2000	3400	2130	1420	1250	1230	995

CAL YR 1977 TOTAL 2382998 MEAN 6529 MAX 69100 MIN 800
WTR YR 1978 TOTAL 2479115 MEAN 6792 MAX 43500 MIN 995

01434000 DELAWARE RIVER AT PORT JERVIS, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1957-60, 1964 to current year.
CHEMICAL DATA: 1958-59 (e), 1964-65 (c), 1966 (a), 1967-68 (c), 1969-76 (d).
MINOR ELEMENTS DATA: 1970 (a), 1972-73 (a), 1974-76 (c).
PESTICIDE DATA: 1974 (a).
ORGANIC DATA: TOC--1974 (b), 1975 (d).
NUTRIENT DATA: 1968 (a), 1969-76 (d).
BIOLOGICAL DATA:
Coliform bacteria--1973-76 (d).
Phytoplankton--1974 (b), 1975-76 (c).
Periphyton--1976 (a).
SEDIMENT DATA: 1959 (c), 1976 (c).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: January 1973 to September 1973.
WATER TEMPERATURES: February 1957 to September 1960, January 1973 to September 1973, June 1974 to current year.
SUSPENDED-SEDIMENT DISCHARGE: February 1957 to September 1960, March 1970 to June 1976.

INSTRUMENTATION.--Temperature recorder since January 1973.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum (water years 1957-59, 1973-78), 29.5°C July 19, 1959, Aug. 3, 1975; minimum (water years 1958-60, 1973, 1975-78), freezing point on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 28.5°C July 24; minimum, freezing point on many days during winter period.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	15.5	15.0	15.0	10.0	9.0	9.5	4.0	3.5	4.0	.5	.0	.5
2	15.5	14.0	15.0	10.5	9.5	10.0	4.5	4.0	4.0	.5	.5	.5
3	14.5	13.5	14.0	11.5	10.0	11.0	5.0	4.5	4.5	.5	.5	.5
4	13.5	12.5	13.0	13.0	11.5	12.5	5.0	1.0	4.5	1.5	.5	.5
5	13.0	12.0	12.5	13.5	12.5	13.0	4.5	2.5	3.5	1.0	.0	.5
6	13.0	12.5	12.5	13.5	13.0	13.0	3.0	2.5	2.5	1.0	.5	.5
7	13.0	12.0	12.5	13.0	12.0	13.0	2.5	1.5	2.0	1.0	.5	1.0
8	12.0	11.5	11.5	12.0	11.0	11.5	2.0	1.5	1.5	2.0	.5	1.0
9	12.0	11.5	11.5	11.5	11.0	11.5	2.0	1.0	1.5	2.5	.0	1.5
10	12.0	11.0	11.5	12.0	11.5	12.0	1.0	.5	.5	.5	.5	.5
11	12.0	11.5	11.5	12.0	10.0	11.0	.5	.0	.5	1.0	.5	.5
12	12.5	11.5	12.0	10.0	7.5	8.5	.5	.5	.5	1.0	.5	.5
13	12.0	11.5	11.5	8.0	6.5	7.5	.5	.5	.5	1.0	.5	.5
14	11.5	10.5	11.0	6.5	6.0	6.0	1.0	.5	1.0	.5	.5	.5
15	10.5	10.0	10.5	6.5	5.5	6.0	1.5	1.0	1.0	.5	.5	.5
16	10.0	9.5	10.0	8.0	6.5	7.5	2.0	1.0	1.5	.5	.5	.5
17	10.0	9.0	9.5	9.0	8.0	8.5	3.5	2.0	3.0	.5	.5	.5
18	9.0	8.0	8.5	9.0	8.0	8.5	3.5	2.5	3.0	.5	.5	.5
19	9.5	8.5	9.0	8.0	6.5	7.5	3.0	2.5	2.5	.5	.5	.5
20	10.0	9.5	10.0	7.0	6.0	6.5	3.0	2.5	3.0	.5	.5	.5
21	10.5	10.0	10.5	6.5	6.0	6.5	3.5	3.0	3.0	.5	.5	.5
22	11.0	10.5	10.5	7.0	6.0	6.5	3.0	2.5	2.5	1.0	.0	.5
23	11.0	10.0	10.5	6.5	6.0	6.0	2.5	2.0	2.5	1.0	.5	.5
24	10.0	9.0	9.5	7.0	6.0	6.5	2.5	2.0	2.0	.5	.5	.5
25	10.0	8.5	9.5	6.5	5.5	6.0	3.0	2.0	2.5	.5	.5	.5
26	10.5	10.0	10.0	6.0	4.5	5.0	2.5	.0	2.0	1.0	.5	.5
27	12.0	10.5	11.0	4.0	2.5	3.0	1.0	.5	.5	.5	.5	.5
28	13.0	12.0	12.5	2.5	2.0	2.5	.5	.5	.5	.5	.5	.5
29	12.5	11.5	12.0	3.0	2.0	2.5	.5	.5	.5	.5	.5	.5
30	11.5	10.5	11.0	3.5	2.0	3.0	1.0	.5	.5	.5	.5	.5
31	10.5	9.5	10.0	---	---	---	1.0	.5	.5	.5	.5	.5
MONTH	15.5	8.0	11.5	13.5	2.0	8.0	5.0	.0	2.0	2.5	.0	.5

01434000 DELAWARE RIVER AT PORT JERVIS, NY--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	.5	.5	.5	1.5	.5	1.0	6.0	4.5	5.5	12.5	10.0	11.0
2	.5	.5	.5	1.5	.5	1.0	6.0	5.0	5.5	12.5	9.5	11.0
3	1.5	.5	.5	.5	.0	.5	5.0	3.5	4.0	14.0	10.0	12.0
4	.5	.5	.5	1.0	.0	.5	4.0	3.0	3.5	13.5	10.5	12.0
5	1.0	.0	.5	1.0	.0	.5	4.5	4.0	4.0	11.5	10.0	10.5
6	.5	.5	.5	1.0	.5	.5	5.5	4.0	5.0	10.0	9.5	9.5
7	.5	.0	.5	1.5	.5	1.0	6.0	4.5	5.5	11.0	9.5	10.0
8	.5	.5	.5	1.5	.5	1.0	6.0	5.0	5.5	12.0	10.0	11.0
9	.5	.5	.5	2.0	.5	1.0	5.5	4.5	5.0	14.0	11.5	12.5
10	.5	.5	.5	2.0	.5	1.5	6.5	4.5	5.5	14.0	12.5	13.5
11	.5	.0	.5	3.0	.5	2.0	7.5	6.0	6.5	15.0	12.0	13.5
12	1.0	.0	.5	3.0	2.0	2.5	8.5	7.0	7.5	15.5	13.5	14.5
13	1.0	.5	.5	4.0	1.5	3.0	8.5	7.5	8.0	14.5	14.0	14.0
14	1.0	.5	.5	2.5	1.5	2.0	8.5	7.0	7.5	14.0	13.0	13.5
15	1.0	.5	.5	2.0	1.0	1.5	7.0	6.5	6.5	13.0	12.0	12.5
16	1.0	.5	.5	1.0	.5	1.0	7.0	5.5	6.0	12.0	11.5	12.0
17	1.5	.5	1.0	2.0	.5	1.5	8.0	6.0	6.5	12.0	11.5	12.0
18	1.0	.5	1.0	2.0	.5	1.5	8.5	6.5	7.5	12.0	11.5	12.0
19	1.0	.0	.5	2.5	1.0	1.5	8.0	7.5	7.5	14.0	12.0	13.0
20	1.0	.5	.5	2.5	1.5	2.0	8.0	7.5	8.0	15.5	14.0	14.5
21	1.0	.5	.5	3.5	2.0	3.0	8.0	7.0	7.5	16.5	15.5	16.0
22	1.0	.0	.5	3.5	1.5	2.5	9.0	6.5	8.0	16.0	15.0	15.5
23	1.0	.5	.5	3.5	1.5	2.5	10.0	7.5	9.0	16.0	14.5	15.5
24	1.0	.5	.5	4.0	3.0	3.5	11.5	8.5	10.0	15.5	15.0	15.5
25	1.5	.5	1.0	3.5	2.5	3.0	11.0	9.0	10.0	16.0	14.5	15.0
26	1.5	.5	1.0	2.5	2.0	2.0	12.5	10.5	11.5	18.0	15.0	16.5
27	1.0	.5	.5	3.0	2.0	2.5	11.5	9.0	11.5	20.0	17.0	18.5
28	1.5	.5	1.0	3.5	2.5	3.0	13.0	10.5	11.5	21.0	19.0	20.0
29	---	---	---	4.5	3.0	4.0	13.5	11.0	12.5	22.0	20.0	21.0
30	---	---	---	4.5	3.5	4.0	13.5	11.0	12.5	22.5	20.5	21.5
31	---	---	---	5.0	3.5	4.5	---	---	---	22.0	20.5	21.5
MONTH	1.5	.0	.5	5.0	.0	2.0	13.5	3.0	7.5	22.5	9.5	14.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	22.5	20.5	21.5	24.5	21.5	23.0	20.5	19.0	20.0	22.5	20.0	21.0
2	23.0	20.5	22.0	23.5	21.0	22.5	23.0	20.0	21.5	22.5	20.0	21.5
3	22.0	20.0	20.5	22.5	19.5	21.0	24.5	21.5	23.0	23.5	21.0	22.0
4	21.0	19.0	20.0	19.5	18.5	19.0	24.5	23.5	24.0	23.0	21.0	22.0
5	20.0	18.0	19.0	20.5	18.0	19.0	24.0	22.0	23.0	23.0	20.5	22.0
6	20.0	17.5	19.0	22.0	18.5	20.5	24.5	22.5	23.5	23.5	21.0	22.0
7	19.0	17.5	18.0	23.5	20.5	22.0	24.0	22.5	23.5	23.5	22.5	23.0
8	18.5	17.5	18.0	25.5	22.5	24.0	23.5	22.0	22.5	22.5	19.5	21.0
9	20.0	18.5	19.0	26.5	24.0	25.5	24.0	22.5	23.0	20.5	19.0	19.5
10	20.0	18.0	19.0	27.5	25.0	26.5	24.0	22.5	23.0	19.5	17.5	19.0
11	21.0	19.0	20.0	26.0	23.0	25.0	23.5	22.5	23.0	19.5	18.5	19.0
12	22.5	19.5	21.0	24.5	21.5	23.0	24.5	22.5	23.0	20.0	18.5	19.5
13	21.5	19.0	20.5	25.0	21.5	23.5	25.5	23.0	24.0	20.0	18.5	19.5
14	19.0	17.5	18.0	24.0	22.5	23.0	26.0	24.0	25.0	20.0	18.0	19.0
15	19.0	16.5	18.0	25.5	22.5	23.5	27.0	24.0	25.5	19.0	18.0	18.0
16	19.5	17.0	18.5	25.0	23.5	24.5	27.0	25.0	26.0	18.5	17.5	18.0
17	18.5	17.5	18.0	25.0	24.0	24.5	28.0	25.0	26.5	19.0	17.5	18.5
18	21.0	17.0	19.0	25.5	23.0	24.5	27.0	25.0	26.0	19.0	18.0	18.5
19	22.5	19.5	21.0	26.0	23.0	24.5	27.0	24.0	25.5	18.0	17.0	17.5
20	24.0	21.0	22.0	27.0	24.0	25.0	26.5	25.0	25.5	18.5	17.0	18.0
21	24.5	21.5	22.5	26.0	24.0	25.5	26.0	23.5	25.0	20.5	18.0	19.0
22	25.0	21.5	23.0	27.0	25.0	26.0	26.0	23.0	24.5	20.5	19.0	19.5
23	24.5	21.5	23.0	28.0	25.0	27.0	24.5	22.5	24.0	20.0	18.0	19.0
24	24.5	21.0	23.0	28.5	26.5	27.5	24.5	22.5	24.0	19.5	17.5	18.5
25	24.5	21.0	23.0	27.0	24.0	26.0	24.5	21.5	23.0	19.5	18.0	18.5
26	23.5	21.0	22.5	24.5	23.0	23.5	23.0	20.5	21.5	18.5	16.5	17.5
27	25.0	21.0	23.0	24.5	23.0	23.5	23.0	20.5	22.0	17.5	16.0	17.0
28	27.0	23.5	25.0	25.0	23.0	24.0	23.0	22.0	22.0	17.0	16.0	16.5
29	26.0	23.0	24.5	24.5	22.0	23.5	24.0	21.5	22.5	16.5	14.5	15.5
30	25.5	23.0	24.5	24.0	23.0	23.5	23.0	22.0	22.5	16.0	14.0	15.0
31	---	---	---	23.0	20.0	21.0	22.5	20.5	21.5	---	---	---
MONTH	27.0	16.5	21.0	28.5	18.0	23.5	28.0	19.0	23.5	23.5	14.0	19.0

01435000 NEVERSINK RIVER NEAR CLARYVILLE, NY

LOCATION.--Lat 41°53'24", long 74°35'25", Sullivan County, Hydrologic Unit 02040104, on left bank 50 ft (15 m) downstream from covered bridge, 300 ft (91 m) upstream from small tributary, 2.2 mi (3.5 km) downstream from confluence of East and West Branches, and 2.2 mi (3.5 km) southwest of Claryville.

DRAINAGE AREA.--65.6 mi^2 (170 km^2).

PERIOD OF RECORD.--July 1951 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,527.37 ft (465.542 m) National Geodetic Vertical Datum of 1929. Prior to October 1, 1974, at datum 1.00 ft (0.305 m) higher.

REMARKS.--Records good except those for winter periods, which are poor.

AVERAGE DISCHARGE.--27 years, 190 ft^3/s (5.381 m^3/s), 39.33 in/yr (999 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,200 ft^3/s (289 m^3/s) July 10, 1952, gage height 8.83 ft (2.691 m) present datum, from rating curve extended above 4,000 ft^3/s (113 m^3/s); minimum, 6.8 ft^3/s (0.19 m^3/s) Sept. 24, 25, 1964.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Nov. 25, 1950, reached a stage of about 10.0 ft (3.05 m) present datum, from floodmarks, discharge, 23,400 ft^3/s (663 m^3/s) by slope-area measurement.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,000 ft^3/s (85 m^3/s), and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 1	2100	*7,260	206	*6.20	1.890	Nov. 8	1945	4,540	129	5.09	1.551
Oct. 9	1515	3,150	89.2	4.38	1.335	Jan. 9	0830	6,650	188	5.98	1.823

Minimum discharge, 26 ft^3/s (0.74 m^3/s) Sept. 9-11, 14, 15, gage height, 0.45 ft (0.137 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1350	119	751	150	190	76	456	202	188	68	52	67
2	1460	113	590	140	180	74	657	177	160	67	48	45
3	528	113	427	130	170	74	409	166	160	65	43	37
4	350	121	336	120	160	72	322	155	182	284	50	33
5	258	117	304	110	160	70	498	198	150	157	47	31
6	231	108	287	110	160	70	432	198	136	97	82	30
7	198	118	242	110	160	70	590	180	140	82	91	29
8	172	1520	200	120	150	70	584	175	586	73	124	28
9	1460	1000	190	3050	140	70	415	742	329	70	73	27
10	795	480	170	640	140	70	409	610	231	68	57	27
11	427	658	170	360	140	70	571	350	198	60	50	29
12	318	392	170	270	130	74	867	287	172	65	46	30
13	254	304	180	240	130	80	892	262	209	60	48	29
14	234	254	513	220	130	120	764	376	176	58	45	27
15	331	223	810	200	130	250	499	1470	155	61	41	27
16	262	198	387	180	120	189	387	826	140	61	40	29
17	1860	236	291	160	110	170	336	916	133	67	39	28
18	779	262	258	150	110	170	318	995	131	77	37	29
19	623	198	223	140	110	160	350	748	140	61	36	95
20	664	178	202	130	110	170	623	504	118	57	33	55
21	409	172	220	130	100	180	510	441	133	53	33	39
22	318	180	205	120	90	212	371	348	209	52	31	39
23	258	158	160	120	80	216	336	297	126	51	27	37
24	216	156	160	140	80	216	318	343	111	55	30	33
25	195	150	470	170	80	212	309	398	103	48	45	32
26	186	258	290	1600	78	212	291	301	101	47	38	30
27	192	186	200	584	76	851	283	251	101	48	33	28
28	164	164	180	300	76	684	266	231	86	57	38	28
29	148	148	170	220	---	481	250	224	80	48	46	29
30	135	148	170	210	---	387	227	192	73	48	37	30
31	126	---	160	200	---	341	---	178	---	46	64	---
TOTAL	14901	8432	9086	10524	3490	6161	13539	12741	4959	2231	1508	1057
MEAN	481	281	293	339	125	199	451	411	165	72.0	48.6	35.2
MAX	1860	1520	810	3050	190	851	892	1470	586	284	124	95
MIN	126	108	160	110	76	70	227	155	73	46	27	27
CFSM	7.33	4.28	4.47	5.17	1.91	3.03	6.88	6.27	2.52	1.10	.74	.54
IN.	8.45	4.78	5.15	5.97	1.98	3.49	7.68	7.22	2.81	1.27	.86	.60

CAL YR 1977 TOTAL 86329 MEAN 237 MAX 4670 MIN 20 CFSM 3.61 IN 48.95
WTR YR 1978 TOTAL 88629 ; MEAN 243 MAX 3050 MIN 27 CFSM 3.70 IN 50.26

01436000 NEVERSINK RIVER AT NEVERSINK, NY

LOCATION.--Lat 41°49'12", long 74°38'09", Sullivan County, Hydrologic Unit 02040104, on right bank at downstream end of outlet channel, 1,650 ft (503 m) downstream from Neversink Dam and State Highway 55, 1.7 mi (2.7 km) southwest of Neversink, and 2.6 mi (4.2 km) upstream from Wynkoop Brook.

DRAINAGE AREA.--91.9 mi² (238 km²).

PERIOD OF RECORD.--October 1941 to current year.

REVISED RECORDS.--WRD NY 1972: 1961 (M), 1968 (M).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,255.24 ft (382.597 m) Board of Water Supply, City of New York datum. Prior to Jan. 17, 1953, water-stage recorder at site 650 ft (198 m) downstream at datum 0.20 ft (0.061 m) lower. Jan. 17, 1953 to Apr. 16, 1954, water-stage recorder at present site at datum 0.41 ft (0.125 m) higher.

REMARKS.--Records good. Subsequent to June 1953, entire flow from 91.8 mi² (238 km²) of drainage area controlled by Neversink Reservoir (see Reservoirs in Delaware River Basin). Part of flow diverted for New York City municipal supply (see Reservoirs in Delaware River Basin). Remainder of flow (except for conservation release and spill) impounded for release during periods of low flow in the lower Delaware River basin, as directed by the Delaware River Master.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 22,300 ft³/s (632 m³/s) Nov. 25, 1950, from rating curve extended above 2,600 ft³/s (73.6 m³/s) on basis of contracted-opening and critical-depth measurements of peak flow; maximum gage height, 11.65 ft (3.551 m) Sept. 27, 1942, site and datum then in use; no flow for all or part of each day Sept. 22-24, Oct. 26-29, 1954.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,300 ft³/s (36.8 m³/s) May 18, gage height, 4.84 ft (1.475 m); minimum, 2.7 ft³/s (0.076 m³/s) Mar. 7, gage height, 2.29 ft (0.698 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50	25	28	26	26	26	43	44	44	43	43	46
2	51	24	28	26	26	26	44	44	44	43	43	43
3	50	24	30	26	26	26	44	46	45	43	43	44
4	47	26	31	26	26	26	42	46	44	43	43	44
5	50	27	27	26	26	26	44	46	44	43	43	42
6	51	28	27	25	26	26	45	46	45	43	44	44
7	51	26	28	25	28	17	45	46	45	54	44	43
8	51	25	29	26	29	76	45	46	46	66	43	45
9	52	26	31	28	27	30	45	46	46	64	43	43
10	52	28	32	26	26	28	46	44	45	64	52	45
11	53	29	33	27	26	26	33	45	46	55	68	43
12	52	29	30	29	25	28	44	46	45	41	58	46
13	52	29	30	26	25	28	46	44	42	41	45	46
14	50	29	29	25	26	28	46	45	42	42	44	46
15	50	30	29	24	25	28	46	46	44	41	57	46
16	52	28	29	26	25	28	47	46	44	43	66	43
17	50	27	28	27	26	28	45	228	44	43	66	46
18	48	28	15	26	25	28	43	1160	44	44	66	46
19	47	28	5.4	26	25	28	44	1090	43	59	66	46
20	46	29	17	27	25	28	43	722	43	86	65	46
21	47	29	27	26	26	28	43	604	43	86	58	46
22	47	29	28	26	28	28	43	347	43	79	44	45
23	47	28	29	26	25	29	44	66	44	67	44	45
24	48	27	30	26	26	28	44	44	44	66	44	45
25	46	27	30	27	31	28	44	57	44	59	44	44
26	45	28	30	28	28	28	45	52	45	45	44	45
27	45	29	28	27	25	29	45	43	42	44	45	45
28	46	27	26	27	26	28	47	43	42	44	45	44
29	46	26	26	26	---	28	45	43	42	44	44	45
30	41	26	26	26	---	28	45	43	42	44	45	44
31	27	---	26	26	---	36	---	43	---	44	45	---
TOTAL	1490	821	842.4	814	734	903	1325	5311	1316	1623	1544	1341
MEAN	48.1	27.4	27.2	26.3	26.2	29.1	44.2	171	43.9	52.4	49.8	44.7
MAX	53	30	33	29	31	76	47	1160	46	86	68	46
MIN	27	24	5.4	24	25	17	33	43	42	41	43	42

CAL YR 1977 TOTAL 10844.1 MEAN 29.7 MAX 482 MIN 4.0
WTR YR 1978 TOTAL 18064.4 MEAN 49.5 MAX 1160 MIN 5.4

01436500 NEVERSINK RIVER AT WOODBOURNE, NY

LOCATION.--Lat 41°45'24", long 74°35'52", Sullivan County, Hydrologic Unit 02040104, on left bank 0.2 mi (0.3 km) downstream from highway bridge at Woodbourne, 0.3 mi (0.5 km) upstream from outlet of South Wind Lake.

DRAINAGE AREA.--113 mi² (293 km²).

PERIOD OF RECORD.--October 1937 to September 1972, October 1977 to September 1978.

GAGE.--Water-stage recorder. Altitude of gage is 1,180 ft (360 m), from topographic map. Prior to Sept. 20, 1938, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods, which are poor. Subsequent to June 1953, entire flow from 91.8 mi² (238 km²) of drainage area controlled by Neversink Reservoir. Part of flow diverted for New York City municipal supply. Remainder of flow (except for conservation releases and spill) impounded for release during periods of low flow in the lower Delaware River basin, as directed by the Delaware River Master.

EXTREMES.--Maximum discharge, 22,000 ft³/s (623 m³/s) Nov. 26, 1950, gage height, 11.19 ft (3.411 m); maximum gage height, 11.2 ft (3.414 m) July 22, 1938, from floodmarks and graph based on gage readings; minimum discharge, 6.7 ft³/s (0.19 m³/s) June 27, 1953; minimum daily, 8.2 ft³/s (0.23 m³/s) June 25, 1953; minimum gage height, 0.80 ft (0.244 m) Aug. 25, 27, 28, 1949.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,450 ft³/s (41.1 m³/s) May 18 gage height, 4.43 ft (1.350 m); maximum gage height, 4.47 ft (1.362 m) Jan. 9 (ice jam); minimum discharge 39 ft³/s (1.10 m³/s) Sept. 16, gage height, 1.36 ft (0.415 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	100	50	176	64	100	43	237	62	70	44	55	59
2	300	47	150	62	90	42	247	60	66	44	49	49
3	170	46	115	60	86	42	170	60	68	45	46	45
4	140	50	92	60	82	42	144	58	77	103	46	47
5	120	51	84	58	80	42	192	91	67	71	45	44
6	110	49	80	56	94	43	165	99	62	54	67	45
7	100	56	76	56	110	43	192	87	64	55	69	42
8	90	340	72	56	96	43	178	77	96	72	76	47
9	140	224	70	500	88	43	142	174	116	72	53	42
10	180	143	70	200	80	44	131	143	79	80	52	45
11	130	197	66	140	70	45	124	100	67	77	74	44
12	110	126	66	110	66	45	143	90	63	47	71	47
13	100	104	70	96	62	46	132	85	67	44	51	45
14	90	115	110	88	60	47	127	132	62	43	49	44
15	180	93	248	82	56	90	108	287	58	44	55	44
16	128	93	141	76	54	80	97	208	56	45	69	42
17	269	104	110	70	52	70	91	325	55	46	69	43
18	173	93	88	66	52	60	87	1310	55	46	68	46
19	162	72	66	64	50	60	92	1210	62	51	68	104
20	191	65	63	62	49	62	135	843	55	88	68	60
21	135	63	102	60	48	96	110	703	52	90	64	52
22	117	72	107	58	47	154	91	474	52	86	44	53
23	106	65	87	58	46	167	83	140	50	73	43	50
24	98	63	80	56	44	167	78	153	49	78	43	48
25	92	63	136	70	44	127	76	158	48	67	44	46
26	89	115	131	370	44	108	72	117	49	46	43	45
27	89	115	127	200	44	356	69	94	49	45	42	45
28	84	82	110	150	44	305	68	86	47	46	46	45
29	79	63	100	130	---	266	68	80	46	45	44	44
30	74	72	72	120	---	216	63	75	45	53	44	44
31	54	---	66	110	---	199	---	72	---	47	70	---
TOTAL	4000	2891	3131	3408	1838	3193	3712	7653	1854	1847	1727	1456
MEAN	129	96.4	101	110	65.6	103	124	247	61.8	59.6	55.7	48.5
MAX	300	340	248	500	110	356	247	1310	116	103	76	104
MIN	54	46	63	56	44	42	63	58	45	43	42	42

WTR YR 1978 TOTAL 36710 MEAN 101 MAX 1310 MIN 42

01437500 NEVERSINK RIVER AT GODEFFROY, NY

LOCATION.--Lat 41°26'28", long 74°36'07", Orange County, Hydrologic Unit 02040104, on right bank just upstream from highway bridge on Graham Road, 0.5 mi (0.8 km) downstream from Basher Kill, 0.8 mi (1.3 km) southeast of Godeffroy, 1.7 mi (2.7 km) south of Cuddebackville, and 8.5 mi (13.7 km) upstream from mouth.

DRAINAGE AREA.--302 mi² (782 km²).

PERIOD OF RECORD.--August to October 1903, August 1909 to April 1914 (gage heights and discharge measurements, also twice-daily figures of discharge for January 1911 to December 1912, which do not represent daily mean discharges because of diurnal fluctuation), and July 1937 to current year. August to October 1903, published as "Navesink River at Godeffroy, NY."

REVISED RECORDS.--WSP 821: Drainage area. WSP 1502: 1951(M).

GAGE.--Water-stage recorder. Datum of gage is 459.66 ft (140.104 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to Apr. 30, 1914, nonrecording gages at same site (August to October 1903 at datum 0.98 ft or 0.299 m higher).

REMARKS.--Records good except those for winter periods, which are poor. Prior to 1949, diurnal fluctuation at low and medium flow caused by powerplant at Cuddebackville. Subsequent to June 1953, entire flow from 91.8 mi² (237.8 km²) of drainage area controlled by Neversink Reservoir (see Reservoirs in Delaware River Basin). Part of flow diverted for New York City municipal supply. Remainder of flow (except for conservation releases and spill), impounded for release during periods of low flow in the lower Delaware River basin, as directed by the Delaware River Master.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 33,000 ft³/s (935 m³/s) Aug. 19, 1955, gage height, 12.49 ft (3.087 m), from rating curve extended above 11,000 ft³/s (312 m³/s) on basis of slope-area measurement of peak flow; practically no flow several times in July 1911.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,810 ft³/s (165 m³/s) Jan. 9, gage height, 7.69 ft (2.344 m); minimum, 86 ft³/s (2.44 m³/s) Sept. 30; minimum gage height, 2.80 ft (0.853 m) Aug. 30, 31.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	443	309	1260	350	500	180	1940	266	719	135	127	196
2	1400	290	1330	320	450	170	2090	257	522	131	138	143
3	862	276	1060	310	380	170	1600	244	473	131	123	129
4	678	280	955	300	300	180	1330	236	639	240	121	121
5	608	285	838	300	300	180	1340	367	497	329	121	120
6	528	276	775	300	450	170	1240	540	426	203	138	111
7	485	295	678	300	600	160	1260	473	390	173	467	106
8	414	1490	540	310	560	160	1250	431	654	162	372	105
9	631	2280	500	3680	500	160	1020	589	678	167	240	106
10	862	1540	460	2520	440	160	887	678	602	159	176	102
11	608	1590	430	1500	400	160	830	558	473	162	156	105
12	522	1260	420	1100	360	170	822	485	408	152	170	108
13	461	1030	420	960	340	180	736	455	408	131	162	112
14	437	862	450	880	320	600	654	595	408	125	145	105
15	727	752	1100	800	310	560	616	2430	329	133	135	105
16	639	662	1040	660	300	500	558	1770	295	129	135	106
17	990	589	854	600	280	450	497	1970	271	131	143	105
18	973	608	752	560	270	430	426	3120	266	145	135	108
19	782	534	678	520	260	420	443	3220	280	127	129	244
20	990	479	608	500	250	450	616	2360	257	125	127	220
21	775	455	719	470	240	600	623	1840	236	147	123	164
22	639	461	912	440	230	900	540	1500	217	145	120	150
23	570	437	759	420	220	1300	473	964	199	143	109	141
24	510	414	670	390	210	1590	378	912	182	147	103	126
25	467	390	752	360	200	1370	367	1270	176	135	108	114
26	443	694	880	1400	190	1190	455	1030	162	121	106	103
27	455	702	640	1600	190	2330	367	830	167	112	105	97
28	437	570	560	1000	180	3060	329	711	159	118	105	94
29	402	522	520	800	---	2760	309	631	149	114	109	91
30	372	516	450	600	---	2450	290	564	143	133	106	88
31	340	---	400	560	---	2050	---	534	---	133	118	---
TOTAL	19450	20848	22410	24810	9230	25210	24286	31830	10785	4638	4672	3725
MEAN	627	695	723	800	330	813	810	1027	360	150	151	124
MAX	1400	2280	1330	3680	600	3060	2090	3220	719	329	467	244
MIN	340	276	400	300	180	160	290	236	143	112	103	88

CAL YR 1977 TOTAL 173289 MEAN 475 MAX 5300 MIN 94
WTR YR 1978 TOTAL 201894 MEAN 553 MAX 3680 MIN 88

RESERVOIRS IN DELAWARE RIVER BASIN

01416900 PEPACTON RESERVOIR.--Lat 42°04'38", long 74°58'04", Delaware County, Hydrologic Unit 02040102, near release chamber at Downsville Dam on East Branch Delaware River, and 1.6 mi (2.6 km) east of Downsville, N.Y. DRAINAGE AREA, 371 mi^2 (961 km^2). PERIOD OF RECORD, September 1954 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Board of Water Supply, City of New York).

Reservoir is formed by an earthfill rockfaced dam. Storage began Sept. 15, 1954. Usable capacity 140,190 mil gal (530.6 hm^3) between minimum operating level, elevation, 1,152.0 ft (351.13 m) and crest of spillway, elevation, 1,280.0 ft (390.14 m). Capacity: at crest of spillway 149,700 mil gal (566.6 hm^3); at minimum operating level, 9,609 mil gal (36.37 hm^3); at sill of diversion tunnel, elevation, 1,143.0 ft (348.39 m), 6,098 mil gal (23.08 hm^3); in dead storage below release outlet, elevation, 1,126.50 ft (343.357 m), 1,898 mil gal (7.184 hm^3). Figures given herein represent total contents. Reservoir impounds water for diversion through East Delaware Tunnel to Rondout Reservoir on Rondout Creek, in Hudson River basin (see elsewhere in this section), for water supply to City of New York; for release during periods of low flow in the lower Delaware River basin, as directed by the Delaware River Master; and for conservation release. No diversion prior to Jan. 6, 1955. Records furnished by Bureau of Water Resources Development and Department of Environmental Protection, City of New York.

EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 154,027 mil gal (583.0 hm^3) Apr. 5, 1960, elevation, 1,282.27 ft (390.836 m); minimum observed (after first filling), 9,575 mil gal (36.24 hm^3) Dec. 26, 1964, elevation, 1,151.92 ft (351.105 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 152,866 mil gal (578.6 hm^3) Jan. 10, elevation, 1,281.65 ft (390.647 m); minimum, 112,368 mil gal (425.3 hm^3) Sept. 30, elevation, 1,258.05 ft (383.454 m).

01424997 CANNONSVILLE RESERVOIR.--Lat 42°03'46", long 75°22'29", Delaware County, Hydrologic Unit 02040101, in emergency gate tower at Cannonsville Dam on West Branch Delaware River, and 1.8 mi (2.9 km) southeast of Stilesville, N.Y. DRAINAGE AREA, 454 mi^2 (1,176 km^2). PERIOD OF RECORD, October 1963 to current year. REVISED RECORDS, WRD NY 1972: 1966. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Board of Water Supply, City of New York).

Reservoir is formed by an earthfill rockfaced dam. Storage began Sept. 30, 1963. Usable capacity 95,706 mil gal (362.2 hm^3) between minimum operating level, elevation, 1,040.0 ft (316.99 m) and crest of spillway, elevation, 1,150.0 ft (350.52 m). Capacity, at crest of spillway, 98,618 mil gal (373.3 hm^3); at minimum operating level, 2,912 mil gal (11.02 hm^3); at mouth of inlet channel to diversion tunnel, elevation, 1,035.0 ft (315.47 m), 1,892 mil gal (7.161 hm^3); in dead storage below release outlet elevation, 1,020.5 ft (311.05 m), 328 mil gal (1.241 hm^3). Figures given herein represent total contents. Impounded water is diverted for New York City water supply via West Delaware Tunnel to Rondout Reservoir in Hudson River basin (see elsewhere in this section); is released in Delaware River for downstream low flow augmentation, as directed by the Delaware River Master; and is released for conservation flow in the Delaware River. No diversion prior to January 29, 1964. Records furnished by Bureau of Water Resources Development, City of New York.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 108,116 mil gal (409.2 hm^3) Mar. 15, 1977, elevation, 1,155.85 ft (352.303 m); minimum observed (after first filling), 11,901 mil gal (45.05 hm^3) Nov. 7, 1968, elevation, 1,066.24 ft (324.990 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 105,362 mil gal (398.8 hm^3) Jan. 10, elevation, 1,154.19 ft (351.797 m); minimum, 69,071 mil gal (261.4 hm^3) Sept. 30, elevation, 1,129.07 ft (344.141 m).

01433000 SWINGING BRIDGE RESERVOIR.--Lat 41°34'25", long 74°47'00", Sullivan County, Hydrologic Unit 02040104, at dam on Mongaup River, and 1.8 mi (2.9 km) northwest of Fowlersville, N.Y. DRAINAGE AREA, 118 mi^2 (306 km^2) excluding Cliff Lake, Lebanon Lake, and Toronto Reservoir. PERIOD OF RECORD, January 1930 to current year. REVISED RECORDS, WSP 1552: 1951-54. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Orange and Rockland Utilities, Inc.). All capacity figures given herein are based on zero storage at minimum operating pool level, 1,010 ft (308 m).

Reservoir is formed by an earthfill dam. Storage began Jan. 19, 1930. Usable capacity, 1,436.6 mil ft^3 (40.7 hm^3) between elevations 1,010.0 ft (307.85 m), minimum operating pool, and 1,071.2 ft (326.50 m), top of flashboards. Capacity below elevation 1,010.0 ft (307.85 m), minimum operating pool, about 212.7 mil ft^3 (6.02 hm^3). Reservoir is used for storage of water for power. Figures given herein represent contents above 1,010.0 ft (307.85 m). Water is received from Cliff Lake, Lebanon Lake, and Toronto Reservoir. Records furnished by Orange and Rockland Utilities, Inc.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 1,461.6 mil ft^3 (41.4 hm^3) Mar. 14, 1977, elevation, 1,071.8 ft (326.68 m); minimum (after first filling), 141.4 mil ft^3 (4.00 hm^3) Dec. 2, 1938, elevation, 987.5 ft (300.99 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 1,403.7 mil ft^3 (39.8 hm^3) May 19, elevation, 1,070.4 ft (326.26 m); minimum, 645.4 mil ft^3 (18.3 hm^3) Mar. 13, elevation, 1,048.3 ft (319.52 m).

01433100 TORONTO RESERVOIR.--Lat 41°37'15", long 74°49'55", Sullivan County, Hydrologic Unit 02040104, at dam on Black Lake Creek, and 2.5 mi (4.0 km) southeast of village of Black Lake, N.Y. DRAINAGE AREA, 23.2 mi^2 (60.1 km^2). PERIOD OF RECORD, January 1926 to current year. REVISED RECORDS, WSP 1552: 1951-54. WSP 1702: 1959 (M). GAGE, nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Orange and Rockland Utilities, Inc.). All capacity figures given herein are based on zero storage at minimum operating pool level, 1,165.0 ft (355.09 m).

Reservoir is formed by an earthfill dam completed July 24, 1926. Storage began Jan. 13, 1926. Usable capacity 1,098.2 mil ft^3 (31.1 hm^3) between elevations 1,165.0 ft (355.09 m), minimum operating pool, and 1,220.0 ft (371.86 m), top of permanent flashboards. Capacity below elevation 1,165.0 ft (355.09 m), minimum operating pool, about 26.8 mil ft^3 (0.759 hm^3). Reservoir is used for storage of water for power. Figures given herein represent contents above 1,165.0 ft (355.09 m). Records furnished by Orange and Rockland Utilities, Inc.

EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 1,171.2 mil ft^3 (33.2 hm^3) July 20, 1945, elevation, 1,222.0 ft (372.47 m); minimum observed (after first filling), 26.8 mil ft^3 (0.759 hm^3) Nov. 15, 1928, elevation, 1,144.5 ft (348.84 m).

EXTREMES FOR CURRENT YEAR: Maximum contents observed, 885.9 mil ft^3 (25.1 hm^3) Feb. 6, elevation, 1,213.6 ft (369.91 m); minimum observed, 74.4 mil ft^3 (2.11 hm^3) Aug. 2, elevation, 1,175.5 ft (358.29 m).

01433200 CLIFF LAKE.--Lat 41°35'00", long 74°47'40", Sullivan County, Hydrologic Unit 02040104, at dam on Black Lake Creek, and 2.5 mi (4.0 km) northwest of Fowlersville, N.Y. DRAINAGE AREA, 6.46 mi^2 (16.7 km^2), excluding area above Toronto Reservoir. PERIOD OF RECORD, January 1939 to current year. REVISED RECORDS, WSP 1552: 1951-54. WDR NY-75-1: 1974(m). GAGE, nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Orange and Rockland Utilities, Inc.). All capacity figures given herein are based on zero storage at minimum operating pool level, 1,043.3 ft (318.00 m).

Reservoir is formed by a concrete gravity-type dam. Storage began Jan. 6, 1939. Usable capacity, 136.06 mil ft^3 (3.85 hm^3) between elevations 1,043.3 ft (318.00 m), minimum operating pool, and 1,072.0 ft (326.75 m), top of permanent flashboards. Capacity below elevation 1,043.3 ft (318.00 m), minimum operating pool, about 6.54 mil ft^3 (0.185 hm^3). Reservoir is used for storage of water for power. Water is received from Toronto and Lebanon Lake reservoirs and is discharged through a tunnel into Swinging Bridge Reservoir. Figures given herein represent contents above 1,043.3 ft (318.00 m). Records furnished by Orange and Rockland Utilities, Inc.

EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 145.44 mil ft^3 (4.12 hm^3) July 30, 31, 1945, elevation, 1,073.1 ft (327.08 m); minimum observed (after first filling), about 6.54 mil ft^3 (0.185 hm^3) Mar. 16, 1963, elevation, 1,038.0 ft (316.38 m).

EXTREMES FOR CURRENT YEAR: Maximum contents observed, 138.6 mil ft^3 (3.93 hm^3) Mar. 31, elevation, 1,072.3 ft (326.84 m); minimum observed, 73.5 mil ft^3 (2.08 hm^3) Feb. 15, elevation, 1,063.4 ft (324.12 m).

RESERVOIRS IN DELAWARE RIVER BASIN--Continued

01435900 NEVERSINK RESERVOIR.--Lat 41°49'40", long 74°38'21", Sullivan County, Hydrologic Unit 02040104, at a gatehouse at Neversink Dam on Neversink River, and 2 mi (3 km) southwest of Neversink, N.Y. DRAINAGE AREA, 91.8 mi² (238 km²). PERIOD OF RECORD, June 1953 to current year. GAGE, nonrecording gage read daily at 0900. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Board of Water Supply, City of New York).

Reservoir is formed by an earthfill rockfaced dam. Storage began June 2, 1953. Usable capacity 34,941 mil gal (132.25 hm³) between minimum operating level, elevation, 1,319.0 ft (402.03 m) and crest of spillway, elevation, 1,440.0 ft (438.91 m). Capacity at crest of spillway 37,146 mil gal (140.6 hm³); at minimum operating level, 2,205 mil gal (8.35 hm³); dead storage below diversion sill and outlet sill, elevation 1,314.0 ft (400.51 m), 1,680 mil gal (6.36 hm³). Figures given herein represent total contents. Reservoir impounds water for diversion through Neversink-Grahamsville Tunnel to Rondout Reservoir on Rondout Creek, in Hudson River basin, for water supply of City of New York (see elsewhere in this section); for release during periods of low flow in the lower Delaware River basin, as directed by the Delaware River Master; and for conservation release. No diversion prior to Dec. 3, 1953. Records furnished by Bureau of Water Resources Development and Department of Environmental Protection, City of New York.

EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 37,978 mil gal (143.7 hm³) Apr. 25, 1961, elevation, 1,441.67 ft (439.421 m); minimum observed (after first filling), 1,985 mil gal (7.513 hm³) Nov. 25, 1964, elevation, 1,316.98 ft (401.415 m).

EXTREMES FOR CURRENT YEAR: Maximum contents observed, 37,514 mil gal (142.0 hm³) May 18, 19, elevation, 1,440.74 ft (439.138 m); minimum observed, 16,504 mil gal (62.47 hm³) Sept. 30, elevation, 1,388.38 ft (423.178 m).

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

Date	Elevation (feet)	Contents (million gallons)	Change in contents (equivalent in ft³/s)	Elevation (feet)	Contents (million gallons)	Change in contents (equivalent in ft³/s)	Elevation (feet)	Contents (million ft³)	Change in contents (equivalent in ft³/s)
	01416900 Pepacton Reservoir ‡			01424997 Cannonsville Reservoir ‡			01433000 Swinging Bridge Reservoir †		
Sept. 30	1,263.67	121,384		1,136.85	79,435		1,067.2	1,276	
Oct. 31	1,279.24	148,402	+1,350	1,150.80	99,905	+1,020	1,065.7	1,218	- 21.6
Nov. 30	1,280.15	150,076	+ 86.3	1,151.36	100,807	+ 46.5	1,067.0	1,268	+ 19.3
Dec. 31	1,280.09	149,966	- 5.49	1,151.19	100,533	- 13.7	1,063.2	1,124	- 53.5
CAL YR 1977	-	-	+ 108	-	-	+ 8.44	-	-	- 0.3
Jan. 31	1,280.45	150,632	+ 33.2	1,151.68	101,322	+ 39.4	1,068.5	1,327	+ 75.6
Feb. 28	1,278.36	146,791	- 212	1,150.50	99,422	- 105	1,050.4	705	-257
Mar. 31	1,280.63	150,966	+ 208	1,152.43	102,529	+ 155	1,069.0	1,347	+240
Apr. 30	1,279.75	149,339	- 83.9	1,150.85	99,985	- 131	1,065.5	1,210	- 52.7
May 31	1,279.72	149,284	- 2.74	1,150.65	99,663	- 16.1	1,068.1	1,311	+ 37.6
June 30	1,277.10	144,504	- 247	1,147.35	94,587	- 262	1,063.7	1,143	- 64.9
July 31	1,271.24	134,143	- 517	1,137.30	80,056	- 725	1,068.7	1,335	+ 71.7
Aug. 31	1,265.14	123,805	- 516	1,136.05	78,329	- 86.2	1,067.0	1,268	- 25.1
Sept. 30	1,257.75	111,898	- 614	1,128.60	68,473	- 508	1,065.0	1,191	- 29.6
WTR YR 1978	-	-	- 40.2	-	-	- 46.5	-	-	- 2.7

Date	Elevation (feet)	Contents (million ft³)	Change in contents (equivalent in ft³/s)	Elevation (feet)	Contents (million ft³)	Change in contents (equivalent in ft³/s)	Elevation (feet)	Contents (million gallons)	Change in contents (equivalent in ft³/s)
	01433100 Toronto Reservoir †			01433200 Cliff Lake †			01435900 Neversink Reservoir ‡		
Sept. 30	1,195.2	404		1,067.8	103		1,392.86	17,928	
Oct. 31	1,202.9	590	+ 69.1	1,066.6	94.4	- 3.2	1,417.44	26,981	+452
Nov. 30	1,197.0	445	- 55.8	1,070.1	120	+ 10.1	1,422.84	29,244	+117
Dec. 31	1,204.2	624	+ 66.7	1,065.4	85.4	- 13.1	1,430.10	32,446	+160
CAL YR 1977	-	-	+ 13.1	-	-	+ 0.3	-	-	+ 36.8
Jan. 31	1,212.8	862	+ 89.0	1,069.0	112	+ 9.9	1,432.10	33,365	+ 45.9
Feb. 28	1,206.0	671	- 78.9	1,066.7	95.1	- 6.9	1,415.41	26,156	-398
Mar. 31	1,187.4	252	-156	1,072.3	139	+ 16.2	1,412.35	24,938	- 60.8
Apr. 30	1,188.4	270	+ 6.8	1,069.7	117	- 8.2	1,429.08	31,983	+363
May 31	1,190.4	306	+ 13.7	1,071.4	131	+ 5.2	1,438.70	36,506	+226
June 30	1,184.4	202	- 40.3	1,064.8	82.4	- 18.8	1,433.94	34,224	-118
July 31	1,175.6	75.5	- 47.1	1,068.7	110	+ 10.2	1,425.57	30,424	-190
Aug. 31	1,176.1	81.3	+ 2.2	1,066.9	96.5	- 4.9	1,408.00	23,260	-358
Sept. 30	1,172.2	94.9	+ 5.2	1,064.9	83.0	- 5.2	1,387.89	16,353	-356
WTR YR 1978	-	-	- 9.8	-	-	- 0.6	-	-	- 6.68

† Elevation at 2400 hours.
‡ Elevation at 0900 hours on first day of following month.

DIVERSIONS FROM DELAWARE RIVER BASIN

01415200 Diversion from Pepacton Reservoir (see preceding pages) on East Branch Delaware River to Rondout Reservoir on Rondout Creek, in Hudson River basin, for municipal supply of City of New York. No diversion prior to Jan. 6, 1955. Records furnished by Bureau of Water Resources Development and Department of Environmental Protection, City of New York.
REVISED RECORDS, WRD NY 1972: 1970.

014239000 Diversion from Cannonsville Reservoir (see preceding pages) on West Branch Delaware River to Rondout Reservoir on Rondout Creek, in Hudson River basin, for municipal supply of City of New York. No diversion prior to Jan. 29, 1964. Records furnished by Bureau of Water Resources Development, City of New York.

01435800 Diversion from Neversink Reservoir (see preceding pages) on Neversink River to Rondout Reservoir on Rondout Creek, in Hudson River basin, for municipal supply of City of New York. No diversion prior to Dec. 3, 1953. Records furnished by Bureau of Water Resources Development and Department of Environmental Protection, City of New York.

DIVERSION, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

Month	01415200 Pepacton Reservoir	01423900 Cannonsville Reservoir	01435800 Neversink Reservoir
October.......	654	420	149
November......	742	83.9	251
December......	750	.45	211
CAL YR 1977	650	209	251
January.......	571	0	406
February......	440	0	528
March.........	749	.45	307
April.........	746	0	190
May...........	574	270	131
June..........	635	211	284
July..........	751	311	228
August........	747	.45	373
September.....	735	.45	352
WTR YR 1978	676	109	282

01496450 CANADARAGO LAKE AT SCHUYLER LAKE, NY

LOCATION.--Lat 42°46'50", long 75°01'07", Otsego County, Hydrologic Unit 02050101, on right bank 10 ft (3 m) upstream from Panther Mountain Dam, 300 ft (91 m) downstream from bridge on County Road 22, and 0.6 mi (1.0 km) east of Schuyler Lake.

DRAINAGE AREA.--65.0 mi² (168 km²).

PERIOD OF RECORD.--October 1968 to September 1978 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Area of water surface, 2.96 mi² (7.67 km²).

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 1,283.81 ft (391.305 m) Mar. 15, 1977; minimum, 1,278.02 ft (389.540 m) Nov. 6, 1971.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 1,282.88 ft (391.022 m) Oct. 18; minimum, 1,278.41 ft (389.659 m) Mar. 11-14.

ELEVATION, IN FEET ABOVE NGVD, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1281.55	1280.18	1279.88	1279.44	1279.84	1278.53	1281.53	1279.45	1279.33	1279.05	1278.92	1278.97
2	1281.84	1280.03	1280.05	1279.35	1279.77	1278.51	1282.05	1279.33	1279.30	1279.03	1278.91	1278.95
3	1281.86	1279.87	1280.11	1279.30	1279.69	1278.50	1282.07	1279.22	1279.35	1279.01	1278.91	1278.94
4	1281.90	1279.75	1280.14	1279.22	1279.63	1278.49	1281.99	1279.11	1279.37	1279.03	1279.00	1278.93
5	1281.73	1279.72	1280.12	1279.13	1279.54	1278.47	1282.27	1279.04	1279.36	1279.03	1279.01	1278.91
6	1281.57	1279.62	1280.10	1279.06	1279.48	1278.47	1282.29	1279.00	1279.34	1279.01	1279.01	1278.89
7	1281.39	1279.56	1280.05	1279.00	1279.50	1278.45	1282.27	1279.08	1279.35	1278.99	1279.05	1278.90
8	1281.19	1279.77	1279.98	1278.95	1279.38	1278.44	1282.22	1279.25	1279.46	1278.98	1279.15	1278.87
9	1281.15	1280.02	1279.91	1279.69	1279.28	1278.42	1282.05	1279.35	1279.56	1278.98	1279.18	1278.87
10	1281.14	1280.13	1279.86	1280.06	1279.20	1278.42	1281.86	1279.44	1279.53	1278.97	1279.25	1278.82
11	1281.00	1280.75	1279.86	1280.21	1279.12	1278.41	1281.74	1279.46	1279.23	1278.95	1279.26	1278.81
12	1280.90	1280.93	1279.79	1280.31	1279.04	1278.41	1281.84	1279.45	1279.15	1278.93	1279.26	1278.90
13	1280.78	1280.94	1279.73	1280.31	1278.98	1278.41	1281.85	1279.45	1279.10	1278.90	1279.25	1278.90
14	1280.65	1280.86	1279.82	1280.30	1278.93	1278.45	1281.82	1279.45	1279.04	1278.90	1279.23	1278.87
15	1280.79	1280.75	1280.25	1280.23	1278.87	1278.58	1281.69	1279.46	1278.96	1278.91	1279.21	1278.86
16	1280.83	1280.65	1280.38	1280.13	1278.82	1278.64	1281.51	1279.46	1279.02	1278.91	1279.18	1278.89
17	1282.03	1280.59	1280.43	1280.04	1278.78	1278.70	1281.33	1279.48	1278.83	1278.92	1279.16	1278.91
18	1282.84	1280.58	1280.41	1280.03	1278.75	1278.73	1281.15	1279.49	1278.84	1278.90	1279.14	1278.92
19	1282.79	1280.50	1280.38	1279.89	1278.71	1278.77	1280.99	1279.52	1278.79	1278.89	1279.11	1279.26
20	1282.64	1280.40	1280.30	1279.83	1278.68	1278.79	1280.90	1279.52	1278.74	1278.88	1279.12	1279.35
21	1282.40	1280.30	1280.25	1279.83	1278.66	1278.83	1280.86	1279.53	1278.81	1278.87	1279.08	1279.37
22	1282.16	1280.25	1280.17	1279.67	1278.65	1279.26	1280.75	1279.52	1279.04	1278.87	1279.06	1279.38
23	1281.93	1280.14	1280.07	1279.55	1278.65	1279.56	1280.60	1279.50	1279.08	1278.86	1279.04	1279.13
24	1281.69	1280.06	1279.98	1279.45	1278.63	1279.89	1280.44	1279.49	1279.09	1278.90	1279.02	1278.90
25	1281.46	1279.96	1279.97	1279.38	1278.60	1280.03	1280.29	1279.48	1279.08	1278.86	1279.02	1278.84
26	1281.25	1279.98	1279.98	1279.62	1278.57	1280.15	1280.15	1279.46	1279.06	1278.83	1279.00	1278.76
27	1281.05	1279.92	1279.92	1279.93	1278.56	1280.61	1280.01	1279.44	1279.08	1278.83	1278.99	1278.69
28	1280.86	1279.85	1279.83	1279.98	1278.54	1281.06	1279.88	1279.42	1279.09	1278.93	1278.97	1278.64
29	1280.66	1279.78	1279.72	1279.99	---	1281.23	1279.73	1279.39	1279.09	1278.91	1278.97	1278.58
30	1280.48	1279.72	1279.63	1279.96	---	1281.29	1279.59	1279.38	1279.07	1278.93	1278.96	1278.52
31	1280.31	---	1279.53	1279.91	---	1281.30	---	1279.35	---	1278.92	1278.97	---
MEAN	1281.45	1280.19	1280.02	1279.73	1279.03	1279.15	1281.26	1279.39	1279.14	1278.93	1279.06	1278.92
MAX	1282.84	1280.94	1280.43	1280.31	1279.84	1281.30	1282.29	1279.53	1279.56	1279.05	1279.26	1279.38
MIN	1280.31	1279.56	1279.53	1278.95	1278.54	1278.41	1279.59	1279.00	1278.74	1278.83	1278.91	1278.52

CAL YR 1977 MEAN 1279.67 MAX 1283.77 MIN 1278.23
WTR YR 1978 MEAN 1279.69 MAX 1282.84 MIN 1278.41

01496500 OAKS CREEK AT INDEX, NY

LOCATION.--Lat 42°39'56", long 74°57'36", Otsego County, Hydrologic Unit 02050101, on right bank 200 ft (61 m) upstream from bridge on State Highway 28 at Index, 0.5 mi (0.8 km) upstream from mouth, and 3 mi (5 km) southwest of Cooperstown.

DRAINAGE AREA.--102 mi² (264 km²).

PERIOD OF RECORD.--November 1929 to September 1932, March 1937 to current year.

REVISED RECORDS.--WSP 2103: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,174.50 ft (357.988 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to Sept. 30, 1932, nonrecording gage at different datum.

REMARKS.--Records fair except those for winter periods, which are poor. Prior to June 1964, flow regulated by natural storage in Canadarago Lake, thereafter by dam at outlet.

AVERAGE DISCHARGE.--43 years (1930-32, 1937-78), 173 ft³/s (4.899 m³/s), 23.03 in/yr (585 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,320 ft³/s (94.0 m³/s) Oct. 17, 1977, gage height, 7.62 ft (2.323 m); minimum discharge, 1.3 ft³/s (0.037 m³/s) Aug. 4, 5, 1962, gage height, 1.79 ft (0.546 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 900 ft³/s (25.5 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 17	1500	*3,320	94.0	*7.62	2.323	Apr. 5	1100	1,480	41.9	5.86	1.786
Apr. 2	0200	1,620	45.9	5.84	1.780	Apr. 12	0700	1,090	30.9	5.37	1.637

Minimum discharge, 7.5 ft³/s (0.21 m³/s) July 27, gage height, 2.18 ft (0.664 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	564	301	336	200	270	76	992	248	59	29	16	18
2	719	286	439	190	250	74	1420	235	54	26	14	15
3	607	268	406	180	240	74	1070	216	62	23	15	13
4	592	258	370	170	220	72	960	199	63	32	36	12
5	542	274	330	170	210	70	1330	190	62	29	24	12
6	507	259	300	160	210	68	1190	196	60	25	24	11
7	466	249	270	160	200	66	1200	185	75	22	49	10
8	426	331	250	160	180	66	1150	100	145	20	140	9.9
9	473	419	230	468	170	64	968	100	140	19	60	9.0
10	460	357	220	365	170	64	856	122	124	18	59	8.8
11	410	579	210	290	160	64	814	107	180	19	56	10
12	412	516	200	270	160	66	1030	100	191	16	54	22
13	376	465	190	260	150	73	930	94	196	15	53	17
14	363	435	280	250	140	91	892	94	185	13	49	12
15	476	409	498	240	130	179	768	104	162	16	45	10
16	441	392	493	240	130	167	675	104	124	16	42	14
17	1860	379	430	230	120	150	600	120	120	14	38	17
18	1460	414	390	230	120	140	545	113	117	13	36	15
19	1050	377	370	230	110	150	498	120	131	12	33	182
20	933	359	350	220	100	156	516	109	120	11	30	111
21	782	342	330	220	100	193	506	111	112	10	29	78
22	682	340	320	220	96	364	457	105	73	10	25	73
23	604	335	300	220	92	370	422	96	45	9.9	22	82
24	538	330	280	210	88	402	394	85	41	10	20	132
25	489	325	270	220	86	362	366	83	39	10	20	126
26	448	318	260	300	84	369	346	78	36	9.3	20	113
27	416	298	250	397	80	553	326	74	35	8.3	17	102
28	387	290	230	330	78	641	308	69	37	23	16	92
29	361	280	220	310	---	775	284	66	35	17	16	84
30	339	270	210	300	---	757	270	64	32	20	15	76
31	316	---	200	280	---	745	---	63	---	16	17	---
TOTAL	18499	10455	9432	7690	4144	7461	22083	3751	2855	531.5	1090	1486.7
MEAN	597	349	304	248	148	241	736	121	95.2	17.1	35.2	49.6
MAX	1860	579	498	458	270	775	1420	248	196	32	140	182
MIN	316	249	190	160	78	64	270	63	32	8.3	14	8.8
CFSM	5.85	3.42	2.98	2.43	1.45	2.36	7.22	1.19	.93	.17	.35	.49
IN.	6.75	3.81	3.44	2.80	1.51	2.72	8.05	1.37	1.04	.19	.40	.54

CAL YR 1977 TOTAL 99108.0 MEAN 272 MAX 2160 MIN 14 CFSM 2.67 IN 36.14
WTR YR 1978 TOTAL 89478.2 MEAN 245 MAX 1860 MIN 8.3 CFSM 2.40 IN 32.63

01499500 EAST SIDNEY LAKE AT EAST SIDNEY, NY

LOCATION.--Lat 42°19'40", long 75°13'42", Delaware County, Hydrologic Unit 02050101, at East Sidney Dam on Ouleout Creek, 0.3 mi (0.5 km) upstream from bridge on County Highway 44 at East Sidney, 4.4 mi (7.1 km) upstream from mouth, and 4.5 mi (7.2 km) east of Unadilla.

DRAINAGE AREA.--103 mi² (267 km²).

PERIOD OF RECORD.--November 1949 to September 1952 (monthly elevations and contents), October 1952 to current year. Prior to October 1970, published as "East Sidney Reservoir at East Sidney."

REVISED RECORDS.--WSP 2103: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Lake is formed by concrete dam and rockfill dike, completed by Corps of Engineers in June 1950; regulation of outflow began in November 1949; first used for flood regulation on Mar. 28, 1950. Useable capacity, 33,550 acre-ft (41.4 hm³) between elevations 1,115.0 ft or 339.85 m (sill of conduits) and 1,203.0 ft or 366.67 m (crest of spillway). Dead storage, 56 acre-ft (0.07 hm³). Discharge is controlled by the operation of five gates. Water is stored during high flows and released when downstream conditions warrant. Lake is used for flood control and recreation.

COOPERATION.--Capacity table furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 1,194.4 ft (364.05 m) Apr. 6, 1960, contents, 25,100 acre-ft (30.9 hm³); minimum, 1,115.0 ft (339.85 m) Aug. 31, 1953, Sept. 7-26, Nov. 4, 1964, contents, 56 acre-ft (0.07 hm³).

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 1,184.33 ft (360.984 m) Oct. 20, contents, 17,280 acre-ft (21.3 hm³); minimum, 1,138.52 ft (347.021 m) Dec. 4, contents, 1,451 acre-ft (1.79 hm³).

Capacity table (elevation, in feet, and useable contents, in acre-feet)
(Based on field survey by Corps of Engineers in 1938)

1,135.0	1,080	1,160.0	5,910
1,140.0	1,630	1,170.0	9,610
1,145.0	2,360	1,180.0	14,610
1,150.0	3,280	1,190.0	21,370

ELEVATION, IN FEET ABOVE NGVD, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1160.31	1150.86	1154.00	1140.26	1141.06	1139.89	1156.65	1140.22	1150.30	1150.22	1150.16	1150.71
2	1161.82	1150.70	1155.18	1140.41	1140.99	1139.88	1157.74	1140.71	1150.52	1150.26	1150.16	1150.89
3	1157.84	1150.45	1147.92	1140.15	1140.65	1139.88	1159.74	1141.47	1150.87	1150.29	1150.19	1150.97
4	1151.71	1150.15	1140.30	1140.17	1140.28	1140.21	1156.54	1142.10	1151.20	1150.46	1150.79	1150.98
5	1150.18	1149.88	1140.38	1140.39	1139.86	1140.43	1152.75	1142.73	1151.13	1150.71	1151.14	1150.84
6	1150.53	1149.77	1140.13	1140.59	1140.23	1140.64	1152.21	1143.80	1150.98	1150.83	1151.20	1150.79
7	1150.28	1150.00	1140.06	1140.52	1140.52	1140.58	1150.02	1144.86	1150.72	1150.88	1150.25	1150.81
8	1150.05	1150.71	1140.32	1140.58	1140.74	1140.42	1147.87	1145.67	1150.93	1150.91	1150.29	1150.79
9	1151.07	1150.97	1140.24	1152.72	1140.17	1140.25	1147.92	1145.81	1150.83	1150.94	1150.21	1150.78
10	1152.03	1150.55	1140.56	1162.55	1140.08	1140.15	1145.78	1146.12	1150.50	1150.96	1150.14	1150.75
11	1151.01	1152.77	1140.19	1159.90	1139.98	1140.05	1141.56	1146.74	1150.04	1151.10	1150.25	1150.74
12	1150.03	1150.77	1139.72	1151.04	1139.87	1139.98	1141.93	1147.40	1150.14	1151.16	1150.33	1150.73
13	1150.36	1150.64	1140.55	1142.43	1139.97	1140.01	1141.82	1147.96	1150.47	1151.06	1150.40	1150.71
14	1150.46	1150.81	1141.07	1140.78	1140.01	1140.56	1140.91	1148.49	1150.81	1150.94	1150.42	1150.68
15	1152.25	1150.39	1147.77	1140.02	1139.88	1141.23	1139.65	1149.08	1150.81	1151.02	1150.38	1150.67
16	1151.06	1150.05	1153.78	1140.03	1139.73	1140.48	1139.95	1149.83	1150.71	1150.50	1150.30	1150.67
17	1161.10	1150.46	1150.38	1140.55	1140.16	1140.22	1140.29	1150.49	1150.55	1150.64	1150.21	1150.68
18	1174.77	1151.09	1143.63	1140.92	1140.56	1140.53	1140.13	1150.36	1150.37	1150.57	1150.13	1150.71
19	1179.43	1151.42	1141.44	1140.33	1140.81	1140.81	1139.87	1150.57	1150.37	1150.33	1150.14	1151.56
20	1183.64	1151.40	1140.18	1140.07	1140.92	1140.85	1140.66	1150.57	1150.40	1150.27	1150.16	1150.94
21	1183.17	1151.23	1140.17	1140.10	1141.01	1141.36	1140.77	1150.43	1150.31	1150.18	1150.16	1150.71
22	1179.97	1151.31	1140.12	1140.52	1140.69	1142.78	1140.10	1150.28	1150.86	1150.09	1150.15	1151.18
23	1175.72	1151.16	1140.29	1140.81	1140.39	1140.85	1140.02	1150.24	1151.03	1150.12	1150.13	1151.01
24	1170.29	1150.89	1140.14	1140.43	1140.21	1140.78	1140.22	1150.56	1150.99	1150.13	1150.11	1150.62
25	1162.56	1150.55	1141.48	1140.32	1140.12	1140.12	1140.23	1150.94	1150.85	1150.12	1150.12	1150.50
26	1153.06	1150.41	1143.89	1150.36	1140.00	1139.88	1140.21	1151.10	1150.69	1150.10	1150.14	1150.43
27	1149.26	1150.44	1141.95	1164.81	1139.87	1145.10	1140.49	1150.92	1150.53	1150.07	1150.16	1150.63
28	1150.01	1150.24	1140.33	1166.27	1139.90	1155.97	1140.62	1150.61	1150.38	1150.11	1150.16	1150.73
29	1150.54	1149.92	1140.38	1162.42	---	1161.41	1140.58	1150.29	1150.21	1150.14	1150.15	1150.91
30	1150.83	1149.57	1140.83	1156.27	---	1163.33	1140.40	1150.16	1150.17	1150.15	1150.14	1150.51
31	1150.92	---	1140.22	1144.52	---	1160.74	---	1150.09	---	1150.16	1150.27	---
MEAN	1158.59	1150.65	1142.83	1145.85	1140.31	1143.21	1144.59	1147.76	1150.62	1150.50	1150.29	1150.79
MAX	1183.64	1152.77	1155.18	1166.27	1141.06	1163.33	1159.74	1151.10	1151.20	1151.16	1151.20	1151.56
MIN	1149.26	1149.57	1139.72	1140.02	1139.73	1139.88	1139.65	1140.22	1150.04	1150.07	1150.11	1150.43
+	3,473	3,213	1,650	1,750	1,621	5,467	1,662	3,319	3,321	3,317	3,393	3,287
‡	-48.2	-4.4	-25.4	+1.6	-2.3	+62.5	-63.9	+26.9	0	-0.1	+1.2	-1.8

CAL YR 1977 MEAN 1150.02 MAX 1183.64 MIN 1139.58 ‡ 0
WTR YR 1978 MEAN 1148.05 MAX 1183.64 MIN 1139.65 ‡ -4.4

+ CONTENTS, IN ACRE-FEET, AT END OF MONTH.
‡ CHANGE IN CONTENTS, EQUIVALENT IN CUBIC FEET PER SECOND.

01500000 OULEOUT CREEK AT EAST SIDNEY, NY

LOCATION.--Lat 42°20'00", long 75°14'07", Delaware County, Hydrologic Unit 02050101, on right bank 0.2 mi (0.3 km) downstream from bridge on County Highway 44, 0.4 mi (0.6 km) downstream from East Sidney Dam, at East Sidney, and 4.0 mi (6.4 km) upstream from mouth.

DRAINAGE AREA.--103 mi^2 (267 km^2).

PERIOD OF RECORD.--August 1940 to current year.

REVISED RECORDS.--WSP 2103: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,086.31 ft (331.107 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to June 13, 1947, water-stage recorder at site 0.5 mi (0.8 km) upstream at datum 27.30 ft (8.321 m) higher.

REMARKS.--Records good except those for period of no gage-height record, May 16 to June 22, which are fair. Since November 1949, flow regulated by East Sidney Lake (see station 01499500).

AVERAGE DISCHARGE.--38 years, 174 ft^3/s (4.928 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,250 ft^3/s (205 m^3/s) Dec. 30, 1942, gage height, 7.62 ft (2.323 m) site and datum then in use, from rating curve extended above 4,000 ft^3/s (113 m^3/s); minimum, 1.2 ft^3/s (0.034 m^3/s), result of construction operations, Aug. 13, 14, 17, 1949, gage height, 0.32 ft (0.098 m).

EXTREMES OUTSIDE PERIOD OF RECORD.--A discharge of 16,700 ft^3/s (473 m^3/s) in July 1935 was determined, by computation of flow over dam and from floodmarks.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,770 ft^3/s (50.1 m^3/s) Oct. 24, gage height, 4.72 ft (1.439 m); minimum, 9.6 ft^3/s (0.27 m^3/s) Aug. 3, 4, gage height, 0.91 ft (0.277 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	689	135	667	133	198	43	1190	71	16	14	15	13
2	817	135	1480	170	195	43	452	33	16	14	15	13
3	1370	135	1480	123	184	35	657	23	24	14	12	13
4	943	134	627	108	148	30	1230	24	52	14	13	22
5	332	133	410	109	115	29	814	24	60	14	25	27
6	350	104	385	109	100	35	736	25	60	14	226	12
7	368	75	268	109	100	48	901	25	60	14	196	12
8	219	221	264	112	127	48	587	57	100	14	95	12
9	319	249	219	385	124	48	489	80	120	14	77	12
10	493	260	199	473	103	48	677	61	120	14	44	12
11	488	971	198	1350	103	48	553	25	73	14	29	12
12	328	721	137	1370	87	48	376	25	31	24	29	12
13	240	351	171	727	80	50	404	24	29	29	29	12
14	242	354	422	315	80	100	397	25	37	29	29	12
15	588	351	404	234	80	588	331	26	42	166	29	12
16	685	258	525	170	55	294	202	31	42	67	30	12
17	212	211	1160	148	45	202	203	104	42	67	29	12
18	11	214	904	174	46	154	204	140	42	67	19	13
19	12	214	435	184	46	157	159	140	42	43	14	383
20	531	215	343	148	50	184	219	140	42	31	14	167
21	1440	214	321	115	59	460	298	140	42	31	14	87
22	1590	215	325	100	71	1220	230	133	42	20	14	101
23	1550	215	239	112	63	751	167	86	50	15	14	128
24	1660	214	239	130	55	725	154	60	50	15	13	88
25	1660	213	246	167	55	507	154	60	50	15	13	67
26	1320	211	350	663	55	438	124	82	50	15	13	36
27	163	211	371	151	46	409	106	93	50	15	13	21
28	133	210	225	932	43	13	106	93	50	15	13	21
29	134	209	152	1150	---	116	103	74	35	15	13	34
30	135	207	204	1370	---	664	103	60	19	15	13	114
31	135	---	228	1050	---	1160	---	31	---	15	14	---
TOTAL	19157	7610	13598	12591	2513	8695	12326	2015	1488	863	1116	1492
MEAN	618	254	439	406	89.8	280	411	65.0	49.6	27.8	36.0	49.7
MAX	1660	971	1480	1370	198	1220	1230	140	120	166	226	383
MIN	11	75	137	100	43	13	103	23	16	14	12	12

CAL YR 1977 TOTAL 103603.7 MEAN 284 MAX 1900 MIN 3.5
WTR YR 1978 TOTAL 83464.0 MEAN 229 MAX 1660 MIN 11

01500500 SUSQUEHANNA RIVER AT UNADILLA, NY

LOCATION.--Lat 42°19'17", long 75°19'01", Otsego County, Hydrologic Unit 02050101, on right bank 25 ft (8 m) downstream from bridge on Bridge Street at Unadilla, 1.0 mi (1.6 km) upstream from Carrs Creek, and 1.6 mi (2.6 km) downstream from Ouleout Creek.

DRAINAGE AREA.--982 mi² (2,543 km²).

PERIOD OF RECORD.--June 1938 to current year.

REVISED RECORDS.--WSP 851: 1938(M). WSP 2103: 1966(M); Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 996.08 ft (303.605 m) National Geodetic Vertical Datum of 1929 (Corps of Engineers bench mark).

REMARKS.--Records good except those for winter periods, which are fair. Slight regulation by upstream lakes and reservoirs.

AVERAGE DISCHARGE.--40 years, 1,598 ft³/s (45.26 m³/s), 22.10 in/yr (561 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 23,500 ft³/s (666 m³/s) Mar. 14, 1977, gage height, 14.64 ft (4.462 m); minimum, 39 ft³/s (1.10 m³/s) Oct. 17, 1964, gage height, 1.38 ft (0.421 m).

EXTREMES OUTSIDE PERIOD OF RECORD.--The flood of Mar. 18, 1936, reached a stage of 16.6 ft (5.060 m), from floodmarks, discharge, 31,300 ft³/s (886 m³/s), from publications of the Corps of Engineers, Baltimore District.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 11,000 ft³/s (312 m³/s):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 18	1030	21,900	620	14.13	4.307

Minimum discharge, 120 ft³/s (3.40 m³/s) Sept. 10, 11, 12, gage height, 1.78 ft (0.543 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4600	1820	4720	1500	2500	620	6430	1350	756	311	190	225
2	7390	1700	7660	1400	2200	600	9060	1240	752	282	177	213
3	6960	1600	6410	1300	1900	560	8620	1160	826	263	172	184
4	5660	1520	4690	1300	1700	540	7240	1080	979	285	286	171
5	4300	1510	3720	1200	1600	500	7620	1060	840	344	443	171
6	3830	1600	3300	1200	1500	500	7850	1140	742	317	584	145
7	3680	1490	3000	1100	1400	540	7640	1170	706	275	780	138
8	3040	2330	2600	1100	1500	540	7510	1100	1050	248	600	132
9	3380	4690	2300	6860	1400	520	6210	1100	1250	282	2500	128
10	4480	4340	2100	7600	1300	500	5500	1140	1420	246	1000	125
11	3690	7050	1900	5600	1200	530	5110	1020	1090	222	1000	122
12	3170	6140	1800	5000	1100	520	5670	920	866	210	800	125
13	2920	4510	2000	4000	1100	560	5930	840	924	203	560	138
14	2680	3760	2900	2800	1200	770	5690	880	998	201	370	168
15	4390	3330	7790	2200	1100	2340	5150	880	872	459	330	160
16	4700	3100	6920	2000	980	2320	4250	1080	748	277	320	153
17	11000	2880	5980	1800	940	1770	3680	1250	662	307	310	159
18	20800	3120	4750	1700	900	1500	3300	1440	617	273	260	166
19	15500	2850	3700	1600	880	1440	3000	1500	815	228	230	1800
20	11500	2540	3300	1500	860	1430	3200	1410	882	198	200	1890
21	9280	2340	3150	1400	840	2040	3720	1330	726	187	190	949
22	7470	2420	3160	1400	800	6630	3240	1300	713	173	180	778
23	6290	2250	2740	1300	760	5830	2780	1180	761	157	180	644
24	5640	2160	2500	1400	740	6290	2500	1080	591	154	180	542
25	5180	2100	2960	1700	700	4690	2300	1050	513	157	182	501
26	4510	2180	3450	6000	680	4120	2110	1020	470	148	185	455
27	2970	2280	2560	7600	660	6430	1950	981	450	142	175	396
28	2640	2120	2120	5910	640	8500	1770	930	442	161	165	367
29	2400	2040	1900	4500	---	6770	1570	898	409	181	161	353
30	2160	1980	1800	4000	---	6030	1460	940	369	183	157	404
31	1960	---	1700	3200	---	6020	---	786	---	190	188	---
TOTAL	178170	83750	109580	91170	33080	81920	142060	34255	23239	7264	13055	11922
MEAN	5747	2792	3535	2941	1181	2643	4735	1105	775	234	421	397
MAX	20800	7050	7790	7600	2500	8530	9060	1500	1420	459	2500	1890
MIN	1960	1490	1700	1100	640	500	1460	786	369	142	157	122
CFSM	5.85	2.84	3.60	3.00	1.20	2.69	4.82	1.13	.79	.24	.43	.40
IN.	6.75	3.17	4.15	3.45	1.25	3.10	5.38	1.30	.88	.28	.49	.45

CAL YR 1977 TOTAL 975558 MEAN 2673 MAX 21000 MIN 195 CFSM 2.72 IN 36.96
WTR YR 1978 TOTAL 809465 MEAN 2218 MAX 20800 MIN 122 CFSM 2.26 IN 30.66

01501004 MILL BROOK AT SHERBURNE TURNPIKE AT NEW BERLIN, NY

LOCATION.--Lat 42°38'13", long 75°21'07", Chenango County, Hydrologic Unit 02050101, at culvert on Sherburne Turnpike, 0.5 mi (0.8 km) northwest of New Berlin, and 1.6 mi (2.6 km) upstream from mouth.

DRAINAGE AREA.--1.78 mi² (4.61 km²).

PERIOD OF RECORD.--Water years 1975 to current year.
CHEMICAL DATA: 1975-76 (b), 1977 (a), 1978 (b).
MINOR ELEMENTS DATA: 1975-76 (a), 1978 (a).
NUTRIENT DATA: 1975-76 (b), 1977 (a), 1978 (b).
BIOLOGICAL DATA:
Coliform bacteria--1975-76 (a), 1978 (b).

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
MAY 26...	1200	1.0	150	6.6	15.0	3	8.2	85	--	--	--
JUN 21...	1100	1.0	146	6.5	16.5	3	8.3	89	270	33	36
JUL 25...	1100	1.3	120	6.8	19.5	2	7.3	86	--	--	--
AUG 31...	1130	.20	220	6.8	15.0	0	9.2	94	2600	210	850
SEP 28...	1100	.30	180	6.8	12.0	1	9.7	94	--	--	--

DATE	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
MAY 26...	67	15	23	2.3	1.7	1.1	63	0	52	10	2.6
JUN 21...	67	13	23	2.3	1.7	.9	66	0	54	7.0	1.9
JUL 25...	60	8	20	2.5	1.0	1.0	64	0	53	6.2	1.6
AUG 31...	100	12	35	3.5	2.2	1.4	110	0	90	9.7	3.1
SEP 28...	81	17	28	2.8	2.1	1.0	78	0	64	15	2.1

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)
MAY 26...	90	1	.23	.01	.00	.32	.56	.09	.05	--
JUN 21...	85	3	--	--	--	--	--	--	--	3
JUL 25...	74	3	.09	.00	.00	.60	.69	.02	.01	--
AUG 31...	119	11	--	--	--	--	--	--	--	1
SEP 28...	106	0	.22	.00	.00	.11	.33	.01	.01	--

01501004 MILL BROOK AT SHERBURNE TURNPIKE AT NEW BERLIN, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)
MAY										
26...	--	--	--	--	--	--	--	--	--	.00
JUN										
21...	0	<10	1	150	4	30	<.5	0	10	--
JUL										
25...	--	--	--	--	--	--	--	--	--	.00
AUG										
31...	2	<10	1	120	6	110	<.5	0	10	--
SEP										
28...	--	--	--	--	--	--	--	--	--	.00

01501008 MILL BROOK TRIBUTARY ABOVE NEW BERLIN, NY

LOCATION.--Lat 42°37'34", long 75°21'06", Chenango County, Hydrologic Unit 02050101, at culvert on town highway, 0.4 mi (0.6 km) west of New Berlin, and 0.7 mi (1.1 km) upstream from mouth.

DRAINAGE AREA.--1.70 mi^2 (4.40 km^2).

PERIOD OF RECORD.--Water years 1975 to current year.
CHEMICAL DATA: 1975-76 (b), 1977 (a), 1978 (b).
MINOR ELEMENTS DATA: 1975-76 (a), 1978 (a).
NUTRIENT DATA: 1975-76 (b), 1977 (a), 1978 (b).
BIOLOGICAL DATA:
Coliform bacteria--1975-76 (a), 1978 (a).

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	COLIFORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
MAY 26...	1100	1.2	252	7.0	14.5	6	9.0	94	--	--	--
JUN 21...	1000	1.2	255	6.8	15.0	4	9.1	95	460	25	71
JUL 25...	1000	.24	295	7.1	16.5	2	7.8	84	--	--	--
AUG 31...	1000	.80	270	7.0	16.0	5	9.2	98	5900	610	2000
SEP 28...	1000	1.0	230	7.0	12.5	1	10.0	98	--	--	--

DATE	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)
MAY 26...	110	14	39	3.6	3.2	1.0	120	0	98	12	4.9
JUN 21...	120	20	41	3.8	3.2	.9	120	0	98	6.3	5.2
JUL 25...	140	14	48	4.2	3.4	1.1	150	0	120	13	5.2
AUG 31...	120	9	43	4.0	3.9	1.4	140	0	110	12	6.6
SEP 28...	100	13	36	3.2	3.2	1.3	110	0	90	13	4.9

DATE	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)
MAY 26...	157	5	.74	.01	.00	.18	.93	.07	.04	--
JUN 21...	146	11	--	--	--	--	--	--	--	3
JUL 25...	168	0	.81	.00	.00	.29	1.1	.02	.00	--
AUG 31...	153	11	--	--	--	--	--	--	--	1
SEP 28...	127	3	.53	.00	.00	.07	.60	.01	.01	--

SUSQUEHANNA RIVER BASIN

01501008 MILL BROOK TRIBUTARY ABOVE NEW BERLIN, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)
MAY										
26...	--	--	--	--	--	--	--	--	--	.00
JUN										
21...	1	<10	17	320	6	20	<.5	0	30	--
JUL										
25...	--	--	--	--	--	--	--	--	--	.00
AUG										
31...	2	<10	1	200	3	10	<.5	0	30	--
SEP										
28...	--	--	--	--	--	--	--	--	--	.00

01501015 MILL BROOK AT NEW BERLIN, NY

LOCATION.--Lat 42°37'32", long 75°19'43", Chenango County, Hydrologic Unit 02050101, on left bank at downstream side of bridge on Academy Street at New Berlin and 80 ft (24 m) upstream from mouth.

DRAINAGE AREA.--4.64 mi² (12.02 km²).

PERIOD OF RECORD.--May 1974 to September 1976, October 1976 to current year (no winter records).

REVISED RECORDS.--WDR NY-76-1: 1974, 1975 (M, P).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,088.89 ft (331.894 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 450 ft³/s (12.7 m³/s) Mar. 30, and Oct. 17, 1977; maximum gage height, 2.17 ft (0.661 m) Oct. 21, 1976 (backwater from debris and/or surge in well); minimum daily discharge, 0.31 ft³/s (0.009 m³/s) Sept. 4, 1978; minimum gage height, 0.44 ft (0.134 m) Sept. 4, 1978.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 80 ft³/s (2.3 m³/s) and maximum(*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 1	1930	157	4.44	a1.49	0.454	Nov. 11	0115	108	3.06	a1.44	0.439
Oct. 17	0345	*450	12.7	*a1.81	.552	Sept. 19	0130	109	3.09	1.69	.515

a Backwater from debris and/or surge in well.

Minimun daily discharge, 0.31 ft³/s (0.009 m³/s) Sept. 4; minimum gage height, 0.44 ft (0.134 m) Sept. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43	6.2				3.5	44	5.1	3.4	2.4	1.2	.69
2	29	5.8				3.4	30	5.1	3.4	2.1	.97	.54
3	18	5.6				3.3	20	4.6	4.0	2.1	1.6	.41
4	14	8.9				3.2	21	4.4	3.8	2.9	2.5	.31
5	11	9.7				3.2	34	5.0	3.6	2.4	1.1	.69
6	12	7.7				3.1	21	5.9	3.2	2.0	1.9	.54
7	9.7	14				3.0	25	6.5	8.2	1.9	5.2	.47
8	8.7	24				3.0	21	5.1	9.1	2.1	9.1	.47
9	23	16				3.1	16	11	8.3	2.7	2.7	.47
10	15	24				3.2	14	8.5	5.0	1.9	2.5	.47
11	11	46				3.4	20	6.4	3.6	1.8	1.5	.85
12	11	19				4.0	24	5.5	3.2	1.6	2.3	1.5
13	9.4	16				5.8	19	5.2	7.9	1.5	1.5	.77
14	9.5	14				10	16	5.0	4.8	1.6	1.2	.61
15	31	13				20	12	5.6	3.6	1.9	1.1	.61
16	18	12				12	11	5.4	2.8	1.5	.97	1.2
17	189	17				9.0	10	6.2	2.6	2.0	.87	1.1
18	74	16				8.0	9.2	6.7	3.5	1.5	.77	3.6
19	39	12				7.4	9.7	6.5	7.1	1.3	.69	28
20	29	11				7.2	15	5.3	3.5	1.2	.69	8.0
21	20	11				17	15	5.7	9.3	1.1	.54	5.5
22	17	10				30	11	5.0	9.0	1.2	.47	4.3
23	14	10				32	9.4	4.6	5.1	2.2	.47	3.7
24	12	10				26	8.7	4.4	4.2	2.4	.47	3.0
25	11	9.6				20	7.9	4.4	3.4	2.3	.54	2.7
26	10	12				24	7.2	4.0	3.3	2.1	.54	2.3
27	9.3	9.8				50	6.6	3.8	4.0	2.1	.61	2.1
28	8.5	9.6				34	6.1	4.0	4.5	4.3	.61	1.6
29	7.6	9.4				27	5.8	4.4	3.1	2.1	.61	1.5
30	7.0	11				22	5.4	3.9	2.6	1.9	.54	1.5
31	6.5	---				21	---	3.6	---	1.6	.61	---
TOTAL	727.2	400.3				421.8	475.0	165.8	143.1	61.7	46.37	79.50
MEAN	23.5	13.3				13.6	15.8	5.38	4.77	1.99	1.50	2.65
MAX	189	46				50	44	11	9.3	4.3	9.1	28
MIN	6.5	5.6				3.0	5.4	3.6	2.6	1.1	.47	.31
CFSM	5.07	2.87				2.93	3.41	1.16	1.03	.43	.32	.57
IN.	5.83	3.21				3.38	3.81	1.34	1.15	.49	.37	.64

01502000 BUTTERNUT CREEK AT MORRIS, NY

LOCATION.--Lat 42°32'43", long 75°14'22", Otsego County, Hydrologic Unit 02050101, on right bank 15 ft (5 m) upstream from bridge on State Highway 23 at Morris, and 0.2 mi (0.3 km) upstream from Calhoun Creek.

DRAINAGE AREA.--59.7 mi² (155 km²).

PERIOD OF RECORD.--June 1938 to current year.

REVISED RECORDS.--WSP 921: 1939. WSP 2103: Drainage area. WRD NY 1974: 1973(P).

GAGE.--Water-stage recorder. Datum of gage 1096.21 ft (334.125 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except those for winter periods, which are poor.

AVERAGE DISCHARGE.--40 years, 101 ft³/s (2.860 m³/s), 23.07 in/yr (586 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,980 ft³/s (169 m³/s) Oct. 17, 1977, gage height, 9.44 ft (2.877 m); minimum daily, 1.3 ft³/s (0.037 m³/s) Sept. 24, 1939.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,400 ft³/s (39.6 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 17	1300	*5,980	169	*9.44	2.877	Mar. 27	a1730	a3,100	87.8	a7.60	2.316
Nov. 11	a0630	a1,500	42.5	a6.10	1.859	Apr. 1	a2300	a2,400	68.0	a7.00	2.134
Jan. 9	1030	2,390	67.7	6.99	2.131	Apr. 5	a0700	a1,400	39.6	a6.00	1.823
Jan. 26	1700	1,590	45.0	6.17	1.881						

a About; sluggish intakes.

Minimum discharge, 9.8 ft³/s (0.28 m³/s) Sept. 10, 11, gage height, 1.67 ft (0.509 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	450	130	540	94	160	34	1100	68	37	25	17	16
2	620	120	420	90	150	33	1200	60	35	24	16	14
3	340	120	280	84	130	32	540	54	44	23	17	13
4	310	140	250	82	120	31	470	54	42	27	45	13
5	250	170	220	82	110	30	1000	59	35	26	24	12
6	250	160	210	80	110	30	600	75	35	23	27	12
7	240	200	190	78	120	30	680	73	43	21	30	11
8	210	350	150	90	110	30	500	62	93	21	161	11
9	380	340	140	1200	100	31	420	81	107	19	53	10
10	330	290	130	340	92	32	360	90	80	21	49	9.8
11	250	920	110	270	86	33	380	73	56	19	36	11
12	270	400	110	250	82	34	540	65	47	19	33	13
13	170	320	130	220	80	36	440	62	77	18	30	15
14	160	270	340	210	74	70	380	63	73	17	27	12
15	390	240	560	180	72	210	310	84	52	24	25	11
16	240	240	300	160	64	120	270	77	45	23	25	13
17	3700	270	250	140	62	100	250	86	43	21	23	15
18	2000	260	220	130	56	90	240	78	42	19	21	18
19	900	220	210	120	54	86	230	90	60	18	19	188
20	700	200	190	110	52	82	280	71	46	16	19	66
21	500	200	180	110	50	150	300	73	41	16	18	46
22	400	190	170	98	48	560	230	68	69	15	17	42
23	350	140	150	86	46	520	210	61	45	15	16	34
24	300	130	120	84	45	450	190	56	39	15	16	30
25	260	120	260	140	45	300	170	54	35	14	16	27
26	240	170	160	860	43	390	150	50	34	14	15	26
27	210	140	130	580	40	2200	130	45	33	14	15	25
28	190	120	120	310	37	1200	110	43	32	19	14	24
29	170	100	110	240	---	620	98	41	30	17	14	23
30	150	120	110	200	---	500	84	40	27	21	14	22
31	140	---	100	170	---	490	---	37	---	18	15	---
TOTAL	15070	6790	6560	6888	2238	8554	11862	1993	1477	602	867	782.8
MEAN	486	226	212	222	79.9	276	395	64.3	49.2	19.4	28.0	26.1
MAX	3700	920	560	1200	160	2200	1200	90	107	27	161	188
MIN	140	100	100	78	37	30	84	37	27	14	14	9.8
CFSM	8.14	3.79	3.55	3.72	1.34	4.62	6.62	1.08	.82	.33	.47	.44
IN.	9.39	4.23	4.09	4.29	1.39	5.33	7.39	1.24	.92	.38	.54	.49

CAL YR 1977 TOTAL 71646.0 MEAN 196 MAX 3700 MIN 11 CFSM 3.28 IN 44.64
WTR YR 1978 TOTAL 63683.8 MEAN 174 MAX 3700 MIN 9.8 CFSM 2.92 IN 39.68

01502500 UNADILLA RIVER AT ROCKDALE, NY

LOCATION.--Lat 42°22'40", long 75°24'23", Chenango County, Hydrologic Unit 02050101, on right bank 400 ft (122 m) downstream from Chenango-Otsego County highway bridge at Rockdale, and 0.7 mi (1.1 km) downstream from Kent Brook.

DRAINAGE AREA.--520 mi² (1,347 km²).

PERIOD OF RECORD.--November 1929 to September 1933, January 1937 to current year.

REVISED RECORDS.--WRD NY 1974: 1973 (P).

GAGE.--Water-stage recorder. Datum of gage is 992.11 ft (302.395 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to Sept. 30, 1933, nonrecording gage at bridge 400 ft (122 m) upstream at datum 0.73 ft (0.223 m) higher.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--44 years (1930-33, 1937-78), 849 ft³/s (24.04 m³/s), 22.17 in/yr (563 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,400 ft³/s (493 m³/s) Dec. 31, 1942, gage height, 12.98 ft (3.956 m); minimum daily, 27 ft³/s (0.76 m³/s) Sept. 20-27, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 5,700 ft³/s (161 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 18	0600	*13,400	379	*11.63	3.545	Mar. 28	0900	8,430	239	9.53	2.905
Jan. 9	1830	5,720	162	8.16	2.487	Apr. 2	1900	7,190	204	8.91	2.716

Minimum discharge, 84 ft³/s (2.379 m³/s) Sept. 10, 11, 12, gage height, 3.70 ft (1.128 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2150	794	2730	800	1500	370	3760	639	280	196	173	136
2	4060	738	3790	760	1300	360	6580	617	268	177	159	130
3	3610	684	2730	740	1100	350	5540	584	306	170	156	118
4	2640	676	2210	720	1000	350	3430	534	389	181	313	110
5	2180	1130	1860	680	920	340	4430	540	339	168	480	102
6	1890	1050	1700	660	840	330	4870	685	291	173	338	100
7	1740	986	1670	640	880	330	4300	767	286	156	325	97
8	1440	2230	1420	700	880	320	4040	716	733	146	902	93
9	1980	2350	1360	4400	840	310	3030	785	923	136	1180	89
10	2950	1920	1210	4400	780	320	2430	1050	862	136	633	85
11	2090	4170	1070	2770	720	320	2330	848	542	149	641	85
12	1860	3930	1070	2270	660	330	3330	694	394	130	447	116
13	1750	2540	1150	1980	620	350	3270	627	455	121	365	156
14	1520	2000	1690	1740	620	543	2810	598	676	116	300	143
15	2980	1700	4290	1530	640	1670	2350	607	488	143	256	118
16	2840	1600	4230	1340	580	1790	1940	665	356	166	231	113
17	7860	1570	2870	1210	540	1300	1660	727	300	173	204	130
18	12700	1960	2140	1000	520	1100	1470	741	288	217	188	170
19	9180	1620	1880	940	500	1000	1370	837	591	166	177	1410
20	5650	1380	1690	860	490	940	1640	786	496	133	166	1680
21	3280	1280	1630	840	470	1300	2080	674	351	118	159	711
22	2480	1390	1600	800	450	3690	1660	653	747	110	156	583
23	2120	1240	1420	760	440	3790	1360	571	667	110	146	409
24	1830	1220	1270	740	430	4050	1190	518	409	107	136	325
25	1630	1130	1730	900	410	2770	1070	493	325	105	139	277
26	1460	1180	1870	2990	410	2460	977	453	283	102	143	240
27	1320	1310	1180	5000	390	5900	890	408	266	102	139	213
28	1190	1150	1000	3970	370	7880	815	375	266	159	130	200
29	1060	1080	960	2670	---	5390	743	356	245	401	127	188
30	954	1050	900	2000	---	3840	689	325	222	226	118	173
31	872	---	840	1700	---	3260	---	297	---	209	127	---
TOTAL	91266	47058	57160	52500	19300	57053	76054	19190	13046	4922	9154	8500
MEAN	2944	1569	1844	1694	689	1840	2535	619	435	159	295	283
MAX	12700	4170	4290	5000	1500	7880	6580	1050	923	401	1180	1680
MIN	872	676	840	640	370	310	689	297	222	102	118	85
CFSM	5.66	3.02	3.55	3.26	1.33	3.54	4.88	1.19	.84	.31	.57	.54
IN.	6.53	3.37	4.09	3.76	1.38	4.08	5.44	1.37	.93	.35	.65	.61

CAL YR 1977 TOTAL 515194 MEAN 1411 MAX 15200 MIN 91 CFSM 2.71 IN 36.86
WTR YR 1978 TOTAL 455203 MEAN 1247 MAX 12700 MIN 85 CFSM 2.40 IN 32.56

01503000 SUSQUEHANNA RIVER AT CONKLIN, NY

LOCATION.--Lat 42°02'07", long 75°48'12", Broome County, Hydrologic Unit 02050101, on left bank at abutment of former highway bridge, 500 ft (152 m) upstream from bridge on County Highway 304 at Conklin, 0.7 mi (1.1 km) downstream from Little Snake Creek, and 3.5 mi (5.6 km) downstream from Pennsylvania-New York State line.

DRAINAGE AREA.--2,232 mi² (5,781 km²).

PERIOD OF RECORD.--November 1912 to current year.

REVISED RECORDS.--WSP 2103: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 841.04 ft (256.349 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 4, 1914, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods, which are poor. Minor regulation by upstream lakes and reservoirs.

AVERAGE DISCHARGE.--65 years (1913-78), 3,633 ft³/s (102.9 m³/s), 22.10 in/yr (561 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 61,600 ft³/s (1,740 m³/s) Mar. 18, 1936, gage height, 20.14 ft (6.139 m); maximum gage height, 20.83 ft (6.349 m) Mar. 22, 1948; minimum discharge, 85 ft³/s (2.41 m³/s) Oct. 14, 1964, gage height, 1.30 ft (0.396 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 18,000 ft³/s (510 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 19	2000	*40,300	1,140	*16.28	4.962	Jan. 27	0600	25,900	733	12.72	3.877
Nov. 11	2000	18,100	513	10.46	3.188	Mar. 23	2000	19,600	555	10.91	3.325
Dec. 16	2400	19,600	555	10.90	3.322	Mar. 28	2300	24,200	685	12.23	3.728
Jan. 9	2200	24,600	697	12.34	3.761	Apr. 3	0500	20,800	589	11.27	3.435

Minimum discharge, 350 ft³/s (9.91 m³/s) Sept. 13, 14, gage height, 2.04 ft (0.622 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9960	3890	8780	3100	5000	1500	15300	2790	1490	903	583	710
2	12400	3590	15500	2900	5000	1400	20200	2600	1350	800	556	634
3	14900	3340	15000	2800	4300	1300	20400	2430	1460	720	544	577
4	12900	3170	11600	2600	3800	1300	17000	2270	1620	1570	750	526
5	10000	3240	8610	2500	3500	1300	17100	2480	1760	1280	967	465
6	8290	3740	7460	2400	3000	1300	17600	3020	1620	999	3650	438
7	7650	3850	6840	2300	2800	1200	18100	3140	1430	903	4000	426
8	6700	7050	6320	2500	3200	1200	18000	3070	2220	782	3120	399
9	6900	9630	5610	20700	3500	1200	14800	3530	3050	712	2730	392
10	9850	10100	5000	21100	3000	1100	11600	3850	3320	660	3060	371
11	9420	16800	4400	14400	2700	1100	10300	3630	3030	705	1960	368
12	7420	17300	3800	10600	2500	1200	11400	3070	2300	621	1760	365
13	6590	13300	3850	9050	2400	1400	12500	2670	2680	568	1510	362
14	5980	9470	7260	7490	2300	2100	11500	2490	2780	527	1260	357
15	12700	7690	16700	6040	2400	5400	10300	2440	2500	506	1080	392
16	15500	6790	18400	5200	2400	7400	8650	2460	2080	635	942	445
17	28400	6350	14800	4500	2100	6400	7190	3450	1720	776	833	425
18	31300	6400	11400	4000	2000	5000	6270	3500	1520	690	749	410
19	37400	6700	9140	3600	1900	4500	5680	3780	2100	689	680	590
20	37100	5800	7630	3300	1800	4400	5680	3700	2530	649	620	3060
21	24100	5220	7060	3000	1800	6000	7450	3460	2160	554	572	3860
22	16000	5050	7180	3000	1800	15200	7420	3130	2060	504	536	2270
23	12500	5070	6440	2800	1700	18300	6050	2870	2030	468	506	1790
24	10400	4730	5640	3000	1600	18100	5240	2670	2080	436	482	1440
25	9200	4540	6270	3500	1600	14100	4730	2560	1570	403	467	1210
26	8240	4560	7800	14000	1500	10400	4360	2310	1310	380	451	1050
27	7210	4730	6400	24300	1500	15100	4030	2090	1200	375	454	949
28	5720	4770	5000	17700	1500	23000	3700	1920	1130	388	456	843
29	5130	4450	4000	12400	---	22400	3330	1760	1080	412	455	766
30	4650	4350	3500	8600	---	17000	3030	1640	1010	557	434	706
31	4230	---	3300	7200	---	14500	---	1600	---	677	539	---
TOTAL	398740	195670	250690	230590	73600	225800	308910	86380	58190	20849	36726	26596
MEAN	12860	6522	8087	7438	2629	7284	10300	2786	1940	673	1185	887
MAX	37400	17300	18400	24300	5000	23000	20400	3850	3320	1570	4000	3860
MIN	4230	3170	3300	2300	1500	1100	3030	1600	1010	375	434	357
CFSM	5.76	2.92	3.62	3.33	1.18	3.26	4.62	1.25	.87	.30	.53	.40
IN.	6.65	3.26	4.18	3.84	1.23	3.76	5.15	1.44	.97	.35	.61	.44

CAL YR 1977 TOTAL 2169540 MEAN 5944 MAX 40300 MIN 404 CFSM 2.66 IN 36.16
WTR YR 1978 TOTAL 1912741 MEAN 5240 MAX 37400 MIN 357 CFSM 2.35 IN 31.88

01505000 CHENANGO RIVER AT SHERBURNE, NY

LOCATION.--Lat 42°40'43", long 75°30'39", Chenango County, Hydrologic Unit 02050102, on right bank 20 ft (6 m) downstream from bridge on State Highway 80, 0.5 mi (0.8 km) west of Sherburne, and 0.5 mi (0.8 km) downstream from Handsome Brook.

DRAINAGE AREA.--263 mi² (681 km²).

PERIOD OF RECORD.--May 1938 to current year.

REVISED RECORDS.--WSP 851: 1938(M). WSP 1502: 1955. WSP 2103: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,037.16 ft (316.126 m) National Geodetic Vertical Datum of 1929. July 22 to Dec. 9, 1953, nonrecording gage or reference point and Dec. 10, 1953 to Jan. 26, 1955, water-stage recorder at temporary site 1.5 mi (2.4 km) downstream, at datum approximately 11.9 ft (3.63 m) lower, during period of construction of highway bridge.

REMARKS.--Records fair except those for winter periods, which are poor. Slight diurnal fluctuation at low flow caused by mill several miles upstream from station. Small diversion during summer months for more than 100 years from Chenango River basin to Oriskany Creek through Oriskany Creek feeder at Solsville for operation of Erie (Barge) Canal.

AVERAGE DISCHARGE.--40 years, 410 ft³/s (11.61 m³/s), 21.17 in/yr (538 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,100 ft³/s (286 m³/s) Mar. 14, 1977, gage height, 9.91 ft (3.021 m); maximum gage height, 9.99 ft (3.045 m) Dec. 30, 1942 (ice jam); minimum discharge, 12 ft³/s (0.34 m³/s) Sept. 25, 1964; minimum gage height, 1.52 ft (0.436 m) Sept. 19, 1963.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 18, 1936, reached a stage of 10.6 ft (3.23 m), from records of National Weather Service.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,500 ft³/s (99.1 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 17	1700	*5,300	150	*9.17	2.795	Apr. 1	2200	4,230	120	8.79	2.679
Jan. 9	0930	4,960	140	9.07	2.765						

Minimum daily discharge, 30 ft³/s (0.85 m³/s) July 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1260	406	1440	410	700	210	2680	266	135	54	97	73
2	1950	386	1480	390	640	200	3710	262	120	49	80	66
3	1430	371	1110	380	580	190	2360	241	177	46	113	59
4	1260	441	934	370	540	190	1890	224	146	51	465	56
5	998	561	720	360	500	180	3030	224	143	49	248	52
6	866	453	660	340	460	180	2460	276	135	48	186	51
7	738	598	600	330	430	180	2350	301	127	39	174	48
8	625	1640	560	330	440	170	2180	276	177	38	425	45
9	1020	1170	520	3200	400	170	1610	333	180	36	352	43
10	1140	948	490	1950	370	170	1320	348	154	35	398	40
11	842	2150	460	1300	350	170	1340	290	143	33	304	46
12	809	1470	450	1000	330	180	1870	245	120	31	248	127
13	710	1170	537	860	320	210	1700	228	156	30	195	115
14	638	971	1000	740	300	297	1510	226	162	35	159	77
15	939	825	2240	640	310	677	1200	241	143	103	133	62
16	875	773	1490	560	300	545	975	231	122	108	115	71
17	3990	734	1210	520	290	482	813	272	101	92	103	117
18	4150	842	1040	500	270	441	681	259	101	61	94	113
19	2910	714	898	480	260	410	621	269	140	48	88	618
20	2240	661	773	460	260	390	677	231	140	42	90	375
21	1650	637	730	450	250	450	702	214	138	38	94	284
22	1270	653	685	450	240	1450	598	208	297	38	82	225
23	998	594	629	450	240	1450	517	180	211	36	73	164
24	829	606	586	450	230	1650	470	162	154	36	69	120
25	722	553	769	450	220	1190	425	154	101	31	75	103
26	653	569	677	1600	220	1230	398	148	82	30	75	91
27	598	541	610	2230	220	2820	371	154	78	35	71	84
28	545	537	557	1490	210	2710	348	154	80	344	66	79
29	498	517	500	1140	---	2190	311	154	78	186	66	76
30	461	517	470	900	---	1810	286	146	64	186	66	78
31	429	---	440	800	---	1690	---	143	---	122	71	---
TOTAL	38043	23008	25265	25550	9880	24282	39403	7062	4105	2110	4875	3558
MEAN	1227	767	815	825	353	783	1313	228	137	68.1	157	119
MAX	4150	2150	2240	3200	700	2820	3710	348	297	344	465	618
MIN	429	371	440	330	210	170	286	143	64	30	66	40
CFSM	4.67	2.92	3.10	3.14	1.34	2.98	4.99	.87	.52	.26	.60	.45
IN.	5.38	3.25	3.57	3.62	1.40	3.43	5.57	1.00	.58	.30	.69	.50

CAL YR 1977 TOTAL 237684 MEAN 651 MAX 7180 MIN 29 CFSM 2.48 IN 33.62
WTR YR 1978 TOTAL 207151 MEAN 568 MAX 4150 MIN 30 CFSM 2.16 IN 29.30

01508800 FACTORY BROOK AT HOMER, NY

LOCATION.--Lat 42°38'36", long 76°11'19", Cortland County, Hydrologic Unit 02050102, at bridge on State Highway 281, in Homer, 1.1 mi (1.8 km) upstream from mouth.

DRAINAGE AREA.--15.8 mi² (40.9 km²).

PERIOD OF RECORD.--Water years 1970, 1972 to current year.
CHEMICAL DATA: 1970 (a), 1972 (b), 1973-74 (d), 1975-78 (b).
NUTRIENT DATA: 1970 (a), 1973-74 (d), 1975-77 (b), 1978 (a).
BIOLOGICAL DATA:
Coliform bacteria--1973-74 (d), 1975-78 (b).

REMARKS.--Prior to November 1972, sampling site at bridge on State Highway 41, 0.1 mi (0.2 km) downstream.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)
NOV											
15...	1300	31	305	7.6	6.5	12.1	100	K250	480	115	130
FEB											
13...	1400	20	350	7.4	1.5	11.8	82	350	K150	K1700	160
MAY											
09...	1300	12	245	7.6	10.0	9.8	88	1100	770	2600	110
SEP											
01...	1200	2.9	388	8.0	16.0	10.7	111	K1800	690	260	160

DATE	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
NOV											
15...	23	39	7.9	3.5	1.3	130	0	110	16	6.2	.0
FEB											
13...	34	47	9.6	4.0	1.0	150	0	120	17	6.5	.0
MAY											
09...	24	34	7.0	3.2	1.2	110	0	90	13	4.6	.0
SEP											
01...	16	49	10	3.8	1.2	180	0	150	14	5.6	.0

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)
NOV										
15...	3.7	142	2.6	.00	2.6	--	--	--	130	10
FEB										
13...	4.2	163	3.1	.00	3.1	.23	3.3	.01	60	10
MAY										
09...	3.1	120	1.8	.01	1.8	--	--	--	450	20
SEP										
01...	4.1	176	2.2	.01	2.2	--	--	--	110	0

K Results based on colony count outside the acceptable range (non-ideal colony count).

01508803 WEST BRANCH TIOUGHNIOGA RIVER AT HOMER, NY

LOCATION.--Lat 42°38'13", long 76°10'37", Cortland County, Hydrologic Unit 02050102, on left bank at downstream side of bridge on Wall Street at Homer and 3.4 mi (5.5 km) upstream from confluence with East Branch. Water-quality sampling site at discharge station.

DRAINAGE AREA.--71.5 mi² (185 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1966 to September 1968, October 1972 to current year.

REVISED RECORDS.--WRD NY 1974: 1973 (P).

GAGE.--Water-stage recorder. Datum of gage is 1,114.81 ft (339.794 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1968, water-stage recorder at bridge on Water Street 500 ft (152 m) upstream at same datum.

REMARKS.--Records fair except those for winter periods, which are poor. A constant 2.8 ft³/s (0.079 m³/s) is diverted for manufacturing purposes from Gate House Pond upstream from station into Onondaga Creek basin (St. Lawrence River basin).

AVERAGE DISCHARGE.--7 years (1968, 1973-78), 145 ft³/s (4.106 m³/s), 27.54 in/yr (700 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,290 ft³/s (64.9 m³/s) Mar. 13, 1977, gage height, 8.08 ft (2.463 m); minimum discharge, 9.6 ft³/s (0.27 m³/s) Nov. 22, 1966, gage height, 1.98 ft (0.604 m) at site then in use; minimum gage height, 1.14 ft (0.347 m) Sept. 3, Oct. 27, 28, 1973.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 650 ft³/s (18.4 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 17	1530	*1,530	43.3	*6.78	2.067	Mar. 27	2230	870	24.6	5.28	1.609
Dec. 15	0430	1,070	30.3	5.78	1.762	Apr. 1	2100	1,260	35.7	6.22	1.896
Jan. 9	1200	a700	19.8	b4.93	1.503	Apr. 5	0530	1,330	37.7	6.38	1.945

a About.
b Backwater from ice.

Minimum discharge, 13 ft³/s (0.37 m³/s) Sept. 9, gage height, 1.20 ft (0.366 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	353	154	339	150	230	88	847	136	71	42	36	26
2	507	150	361	140	210	84	911	133	75	41	31	25
3	513	145	287	130	200	82	639	125	90	41	41	24
4	505	179	253	130	180	82	541	118	79	45	48	23
5	370	171	227	130	180	80	1080	121	73	42	40	22
6	320	157	225	120	170	78	706	144	69	39	39	21
7	275	163	206	120	160	78	778	130	66	37	43	20
8	244	201	193	140	150	76	689	114	75	36	58	19
9	406	176	184	500	150	76	522	159	80	35	44	19
10	444	193	171	340	140	74	452	150	74	35	65	19
11	339	366	160	300	140	74	455	133	67	35	50	21
12	297	285	150	250	130	76	560	125	63	34	52	26
13	262	257	150	230	130	80	485	120	81	32	48	27
14	234	232	372	210	120	94	445	117	80	32	42	24
15	241	220	871	190	120	148	380	113	68	32	39	24
16	273	223	558	180	120	130	331	111	62	31	36	32
17	1060	218	444	170	110	120	289	124	57	30	35	34
18	927	237	383	160	110	110	257	113	56	30	32	53
19	666	215	359	150	110	100	239	106	57	29	31	164
20	530	197	315	140	100	110	270	101	56	28	34	82
21	435	193	299	140	100	150	295	106	59	28	33	63
22	379	195	277	130	98	346	254	99	85	29	25	55
23	342	181	255	130	96	381	224	92	62	29	27	48
24	335	177	235	130	96	447	205	90	55	28	27	43
25	266	168	259	150	96	372	190	86	50	28	29	40
26	246	174	235	420	94	366	181	82	48	27	28	36
27	227	166	201	449	90	639	170	85	48	35	27	34
28	211	163	180	383	90	714	149	80	52	71	26	33
29	195	157	170	324	---	612	147	75	49	47	27	31
30	182	157	160	285	---	513	143	73	45	42	26	29
31	169	---	150	260	---	507	---	70	---	37	27	---
TOTAL	11753	5870	8629	6721	3720	6887	12834	3431	1954	1107	1146	1117
MEAN	379	196	278	217	133	222	428	111	65.1	35.7	37.0	37.2
MAX	1060	366	871	500	230	714	1080	159	90	71	65	164
MIN	169	145	150	120	90	74	143	70	45	27	25	19
CFSM	5.30	2.74	3.89	3.04	1.86	3.11	5.99	1.55	.91	.50	.52	.52
IN.	6.11	3.05	4.49	3.50	1.94	3.58	6.68	1.79	1.02	.58	.60	.58

CAL YR 1977 TOTAL 66429 MEAN 182 MAX 1750 MIN 31 CFSM 2.55 IN 34.56
WTR YR 1978 TOTAL 65169 MEAN 179 MAX 1080 MIN 19 CFSM 2.50 IN 33.91

01508803 WEST BRANCH TIOUGHNIOGA RIVER AT HOMER, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1957, 1970, 1972 to current year.
CHEMICAL DATA: 1957 (a), 1970 (a), 1972 (a), 1973 (c), 1974-78 (b).
NUTRIENT DATA: 1970 (a), 1974-77 (b), 1978 (a).
BIOLOGICAL DATA:
Coliform bacteria--1973 (c), 1974-78 (b).

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)
NOV											
15...	1100	231	370	7.2	5.5	10.6	85	210	200	59	150
FEB											
13...	1100	152	445	7.1	1.5	11.4	79	56	K10	K15	200
MAY											
09...	1100	179	322	7.4	10.0	10.4	93	710	450	K1800	140
SEP											
01...	0930	30	390	7.3	17.5	7.4	80	610	300	K112	170

DATE	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
NOV											
15...	7	42	10	8.0	1.5	170	0	140	16	12	.0
FEB											
13...	32	57	13	9.3	1.1	200	0	160	19	16	.0
MAY											
09...	25	40	9.8	6.8	1.1	140	0	115	16	11	.0
SEP											
01...	25	46	14	11	1.3	180	0	150	17	17	.0

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)
NOV										
15...	3.9	177	1.4	.01	1.4	--	--	--	190	20
FEB										
13...	4.7	219	2.0	.01	2.0	.23	2.2	.01	90	20
MAY										
09...	2.5	156	.95	.01	.96	--	--	--	670	40
SEP										
01...	3.2	198	.99	.01	1.0	--	--	--	130	10

K Results based on colony count outside the acceptable range (non-ideal colony count).

01509000 TIOUGHNIOGA RIVER AT CORTLAND, NY

LOCATION.--Lat 42°36'10", long 76°09'35", Cortland County, Hydrologic Unit 02050102, on right bank at east end of Elm Street at Cortland, 0.4 mi (0.6 km) downstream from confluence of East and West Branches. Water-quality sampling site at Cortland Sewage Treatment Plant, 0.4 mi (0.6 km) downstream from discharge station.

DRAINAGE AREA.--292 mi^2 (756 km^2), including 14.0 mi^2 (36.3 km^2), the flow from which may be diverted into De Ruyter Reservoir in Oswego River basin.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1938 to current year.

REVISED RECORDS.--WSP 2103: Drainage area. WRD NY 1974: 1973.

GAGE.--Water-stage recorder. Datum of gage is 1,084.92 ft (330.683 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1939, water-stage recorder at datum 4.00 ft (1.219 m) higher; Oct. 1, 1939 to Sept. 30, 1963, water-stage recorder at datum 3.00 ft (0.914 m) higher.

REMARKS.--Records good except those for winter periods, which are fair. Diurnal fluctuation at low and medium flow caused by powerplants in mills on West Branch. Slight diversion from East Branch for operation of Erie (Barge) Canal. A constant 2.8 ft^3/s (0.079 m^3/s) is diverted for manufacturing purposes from Gate House Pond on West Branch upstream from station into Onondaga Creek basin (St. Lawrence River basin).

AVERAGE DISCHARGE.--40 years, 503 ft^3/s (14.24 m^3/s), 23.39 in/yr (594 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,000 ft^3/s (368 m^3/s) Mar. 5, 1964, gage height, 12.49 ft (3.807 m); minimum, 9.8 ft^3/s (0.28 m^3/s) Sept. 20, 1939, Sept. 29, 1959; minimum daily, 17 ft^3/s (0.48 m^3/s) Sept. 26, 27, 1959.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,400 ft^3/s (125 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 18	0500	*6,250	177	*9.66	2.944	Apr. 5	1645	5,100	144	8.93	2.722
Apr. 2	0630	5,410	153	9.14	2.786						

Minimum discharge, 66 ft^3/s (1.87 m^3/s) Sept. 9, 10, 11, 12, gage height, 2.67 ft (0.814 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1520	461	1510	450	820	230	3060	372	178	114	114	85
2	2390	441	1990	420	700	220	4810	363	185	99	102	85
3	2170	418	1400	400	620	220	2920	333	279	99	135	80
4	2040	499	1080	390	560	220	2150	312	221	108	461	78
5	1480	615	876	380	560	210	4560	329	200	105	210	78
6	1210	515	822	370	540	210	3470	432	189	96	157	75
7	1020	534	764	360	500	210	3180	404	178	90	182	71
8	864	1170	696	400	470	200	3280	363	200	88	589	71
9	1520	1240	642	2390	450	200	2240	519	218	85	342	69
10	2020	1020	584	2030	430	200	1710	584	214	83	413	69
11	1440	2090	520	1370	400	210	1740	485	185	83	283	66
12	1190	1740	500	1200	390	221	2670	422	168	80	263	138
13	1000	1250	500	1030	390	232	2450	399	218	78	240	108
14	858	994	1440	870	360	304	2170	381	248	78	189	90
15	987	876	3630	764	340	658	1610	359	196	85	161	80
16	1120	876	3030	680	330	615	1240	350	171	83	147	90
17	3880	816	1940	626	340	500	1010	427	157	90	135	120
18	5580	956	1460	540	320	450	876	390	150	88	123	167
19	3600	828	1300	500	300	420	816	355	154	78	117	956
20	2400	730	1110	470	290	440	968	321	154	75	120	519
21	1710	724	1030	450	280	580	1060	342	150	73	114	325
22	1360	799	950	430	270	1630	870	321	308	73	102	259
23	1150	691	846	410	260	1730	724	283	236	73	93	203
24	1020	685	764	400	260	1990	637	263	185	71	90	171
25	864	637	937	440	260	1450	579	248	157	71	90	154
26	781	642	860	1600	250	1280	539	229	144	71	90	138
27	708	605	660	2560	240	2380	499	218	138	73	85	129
28	647	594	580	2130	240	3170	451	207	150	337	83	123
29	589	569	540	1540	---	2590	422	200	141	189	85	117
30	540	564	520	1220	---	1990	399	189	129	141	88	111
31	499	---	480	960	---	1860	---	182	---	135	88	---
TOTAL	48157	24579	33961	27780	11170	26820	53110	10582	5601	3092	5491	4825
MEAN	1553	819	1096	896	399	865	1770	341	187	99.7	177	161
MAX	5580	2090	3630	2560	820	3170	4810	584	308	337	589	956
MIN	499	418	480	360	240	200	399	182	129	71	83	66
CFSM	5.32	2.81	3.75	3.07	1.37	2.96	6.06	1.17	.64	.34	.61	.55
IN.	6.14	3.13	4.33	3.54	1.42	3.42	6.77	1.35	.71	.39	.70	.61

CAL YR 1977 TOTAL 274742 MEAN 753 MAX 8950 MIN 88 CFSM 2.58 IN 35.00
WTR YR 1978 TOTAL 255168 MEAN 699 MAX 5580 MIN 66 CFSM 2.39 IN 32.51

01509000 TIOUGHNIOGA RIVER AT CORTLAND, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1957 to current year.
CHEMICAL DATA: 1957 (e), 1970 (a), 1972 (a).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1956 to September 1957, once-daily measurements, unpublished.
pH: October 1956 to September 1957, once-daily measurements, unpublished.
WATER TEMPERATURES: October 1956 to current year.

REMARKS.--Daily water-temperature measurements made at 0900 hours.

COOPERATION.--Water-temperature records furnished by the city of Cortland.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum daily, 23.5°C July 22, 1957; minimum daily (except water year 1960), freezing point on many days during winter periods in water years 1957, 1959, 1962, 1967-78.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum daily, 19.5°C Aug. 10, minimum daily, freezing point on many days during winter period.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
(ONCE DAILY AT 0900)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13.0	9.0	4.0	2.0	.5	4.0	2.0	7.0	15.0	15.0	15.0	16.5
2	13.0	10.0	5.0	1.0	1.0	.5	1.5	7.5	15.5	15.0	16.5	15.0
3	13.0	13.0	4.0	1.0	1.0	1.5	1.5	8.5	15.0	15.5	18.0	15.0
4	10.0	14.0	4.0	1.5	.0	2.5	3.0	8.5	17.5	13.5	19.0	14.5
5	10.0	14.5	4.0	3.0	.5	2.0	3.0	8.5	12.5	15.0	17.0	16.0
6	11.0	12.0	3.0	4.0	1.0	2.0	3.0	8.5	13.0	15.0	17.0	16.0
7	10.0	12.0	1.0	4.0	1.0	1.0	3.0	8.5	13.0	16.0	18.0	18.0
8	9.0	10.0	1.0	4.0	1.0	2.0	3.5	10.5	14.0	16.0	19.0	14.0
9	10.0	10.5	1.0	.0	1.0	4.0	3.0	10.0	13.5	16.5	19.0	15.0
10	10.0	12.0	1.0	3.0	.5	4.0	5.0	10.0	14.0	16.0	19.5	14.0
11	9.0	8.5	.0	.0	1.0	---	7.0	9.0	16.0	16.0	17.0	16.0
12	10.0	6.0	.0	.0	2.0	4.5	5.0	11.5	16.0	14.5	18.0	17.0
13	9.0	5.0	3.0	1.0	2.5	4.5	8.0	11.0	15.0	14.5	18.0	14.0
14	9.0	4.5	4.0	.0	2.0	4.5	7.0	9.5	13.0	15.0	18.5	13.0
15	10.0	5.5	2.0	1.0	1.0	2.5	5.0	10.0	13.0	15.0	19.0	13.5
16	9.0	6.5	3.0	1.0	1.0	2.5	6.0	10.0	13.0	15.5	19.0	14.0
17	5.5	5.5	2.0	1.0	2.0	3.0	7.0	10.5	13.0	16.0	18.5	14.0
18	5.0	5.5	5.0	1.0	2.0	1.5	6.5	10.5	14.5	17.0	18.5	14.5
19	6.5	8.0	3.0	2.0	2.5	2.0	7.0	11.5	14.5	17.0	17.0	15.5
20	7.5	5.0	3.0	1.5	2.5	3.0	7.5	14.0	15.5	16.5	16.5	16.0
21	8.0	6.0	3.0	1.5	2.5	4.5	5.0	12.0	15.0	17.0	16.0	17.0
22	8.0	5.5	3.0	1.0	2.5	3.5	5.5	12.5	16.5	17.0	15.5	16.0
23	7.0	5.0	3.0	1.5	3.0	3.5	7.0	13.0	16.0	19.0	16.5	13.0
24	6.0	6.0	2.0	.5	3.0	---	8.0	13.0	14.5	17.0	17.5	12.5
25	8.0	5.0	4.0	2.0	3.0	3.0	8.0	14.0	15.0	17.0	16.0	12.5
26	9.0	4.5	1.0	3.0	3.0	2.5	9.5	15.0	15.5	17.5	16.0	11.5
27	10.0	2.5	.0	.0	3.0	2.0	9.5	16.0	16.5	17.0	16.5	11.5
28	10.0	3.0	1.0	.0	3.5	1.0	10.5	17.0	16.5	17.0	17.0	12.0
29	9.5	3.0	1.0	.5	---	1.0	9.5	17.0	16.5	16.5	17.5	11.5
30	9.0	4.0	1.0	.5	---	1.0	8.5	17.0	16.5	15.5	16.0	11.5
31	7.5	---	3.0	1.0	---	1.0	---	18.0	---	15.0	15.5	---
MEAN	9.0	7.5	2.5	1.5	2.0	2.5	6.0	11.5	15.0	16.0	17.5	14.5

WTR YR 1978 MEAN 9.0 MAX 19.5 MIN .0

01509150 GRIDLEY CREEK ABOVE EAST VIRGIL, NY

LOCATION.--Lat 42°30'04", long 76°07'38", Cortland County, Hydrologic Unit 02050102, on right bank 100 ft (30 m) downstream from bridge on Tone Road, 250 ft (75 m) south of State Highway 90, 1.6 mi (2.6 km) northwest of East Virgil, 3.2 mi (5.1 km) northwest of Messengerville, and 3.5 mi (5.6 km) upstream from mouth. Water-quality sampling site at discharge station.

DRAINAGE AREA.--10.4 mi² (26.9 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Discharge measurements, seepage investigation, water year 1974. July 1974 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,270.00 ft (387.096 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,080 ft³/s (116 m³/s) Oct. 9, 1976; maximum gage height, 9.33 ft (3.844 m) Sept. 18, 1977; minimum discharge, 0.9 ft³/s (0.025 m³/s) Aug. 8, 1975, gage height, 4.74 ft (1.445 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 500 ft³/s (14.2 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 17	0430	613	17.4	8.18	2.493	Apr. 1	1615	596	16.9	8.16	2.487
Jan. 9	0400	*1,900	53.8	*9.07	2.765	Apr. 4	2400	908	25.7	8.47	2.582
Jan. 26	1145	ice jam		8.16	2.487						

Minimum daily discharge, 1.1 ft³/s (0.03 m³/s) Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	59	12	129	15	23	5.0	325	15	5.6	2.1	1.8	3.0
2	41	11	56	15	21	4.7	141	15	5.3	2.1	1.8	2.3
3	57	11	43	14	19	4.6	68	14	5.8	2.1	4.5	1.8
4	42	31	35	13	17	4.4	106	14	5.3	2.8	4.5	2.3
5	34	26	29	13	16	4.0	251	19	4.7	2.4	2.8	1.6
6	35	19	31	12	15	3.7	105	29	4.3	2.1	4.5	1.5
7	27	35	26	12	14	3.5	241	21	5.5	2.0	3.7	1.3
8	24	70	24	18	12	3.3	110	17	5.8	1.8	3.4	1.2
9	82	39	23	325	11	3.0	65	38	9.2	2.0	3.9	1.6
10	38	59	21	62	11	3.3	56	28	5.6	1.8	4.9	1.5
11	30	94	20	53	10	3.8	108	23	4.9	1.8	3.1	1.3
12	33	47	19	39	10	5.0	113	22	4.1	1.7	2.5	1.2
13	25	38	19	35	11	9.8	96	21	12	1.6	4.2	1.8
14	22	34	90	31	10	23	75	21	7.4	1.7	2.6	1.6
15	29	32	138	27	9.0	45	49	18	5.1	1.7	2.3	1.4
16	62	31	60	23	8.4	25	38	18	4.1	1.7	2.1	1.6
17	351	32	45	20	7.6	22	34	22	3.7	1.8	1.9	2.5
18	110	30	38	18	7.0	21	31	18	3.5	1.7	1.9	2.1
19	77	26	36	16	6.2	21	32	16	3.5	1.8	1.9	12
20	55	24	32	14	5.6	20	60	15	3.2	1.8	2.1	2.1
21	37	25	31	13	5.2	41	49	17	3.2	2.8	2.4	1.8
22	29	24	28	13	5.6	103	35	14	3.4	2.6	2.0	1.6
23	24	22	26	12	6.0	106	30	12	2.9	2.1	1.9	1.6
24	22	21	24	12	6.0	70	29	11	2.9	2.0	1.8	1.4
25	19	19	27	14	6.0	48	27	10	2.8	2.0	1.8	1.3
26	18	21	20	150	5.4	47	25	9.5	2.6	1.8	1.7	1.3
27	23	19	16	90	5.2	160	23	8.6	2.4	4.7	1.6	1.2
28	16	19	14	51	5.0	92	21	7.6	2.3	4.3	1.6	1.2
29	15	18	13	39	---	77	18	6.7	2.3	2.1	1.6	1.2
30	13	21	15	33	---	65	16	6.2	2.1	1.8	1.9	1.1
31	13	---	17	27	---	82	---	5.6	---	1.8	2.1	---
TOTAL	1462	910	1145	1229	288.2	1126.1	2378	512.4	135.5	66.5	80.8	59.4
MEAN	47.2	30.3	36.9	39.6	10.3	36.3	79.3	16.5	4.52	2.15	2.61	1.98
MAX	351	94	138	325	23	160	325	38	12	4.7	4.9	12
MIN	13	11	13	12	5.0	3.0	16	5.8	2.1	1.6	1.6	1.1
CFSM	4.54	2.91	3.55	3.81	.99	3.49	7.63	1.59	.44	.21	.25	.19
IN.	5.23	3.25	4.10	4.40	1.03	4.03	8.51	1.83	.48	.24	.29	.21

CAL YR 1977 TOTAL 12524.1 MEAN 34.3 MAX 1500 MIN 1.6 CFSM 3.30 IN 44.79
WTR YR 1978 TOTAL 9392.9 MEAN 25.7 MAX 351 MIN 1.1 CFSM 2.47 IN 33.59

01509150 GRIDLEY CREEK ABOVE EAST VIRGIL, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1975 to current year.
CHEMICAL DATA: 1975-78 (d).
NUTRIENT DATA: 1975-77 (d), 1978 (a).
BIOLOGICAL DATA:
Coliform bacteria--1975-78 (d).

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)
OCT											
06...	1300	40	123	7.0	12.0	9.6	90	400	230	270	44
27...	1300	16	175	7.4	12.0	8.7	81	K140	K134	69	70
NOV											
15...	0830	28	138	6.9	5.0	10.7	85	610	K110	144	50
DEC											
06...	1300	32	133	7.0	.5	12.9	93	300	114	260	47
JAN											
24...	0900	12	195	6.7	.0	13.0	89	--	33	270	75
FEB											
13...	0830	10	195	7.1	1.0	11.8	83	560	37	260	73
MAR											
21...	1300	32	165	7.1	5.0	11.0	86	K100	36	570	61
APR											
11...	1000	92	83	6.9	6.0	9.8	82	K95	54	330	28
MAY											
09...	0900	48	92	7.5	9.5	9.2	84	K1900	K982	4400	32
JUN											
21...	1300	3.0	272	7.1	18.0	8.5	93	1600	750	950	120
JUL											
11...	1000	1.8	310	7.8	12.5	9.5	92	--	K160	K160	140
AUG											
31...	1400	2.0	280	7.4	15.0	9.3	97	7000	K1800	870	130
SEP											
28...	1300	1.2	300	7.7	12.0	10.1	97	--	--	--	150

DATE	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT											
06...	10	13	2.7	2.7	1.1	41	0	34	14	5.2	.0
27...	23	21	4.2	5.0	1.1	57	0	47	13	8.0	.0
NOV											
15...	13	15	3.1	3.8	1.0	46	0	38	13	6.4	.0
DEC											
06...	16	14	3.0	4.1	.9	38	0	31	14	5.9	.0
JAN											
24...	26	23	4.3	5.5	1.0	60	0	49	15	10	.1
FEB											
13...	23	22	4.3	5.6	.9	61	0	50	14	9.9	.0
MAR											
21...	28	19	3.3	10	1.2	40	0	33	13	14	.1
APR											
11...	11	8.1	1.8	2.4	.7	20	0	16	11	3.3	.0
MAY											
09...	16	9.7	2.0	2.9	.7	20	0	16	10	3.8	.0
JUN											
21...	26	35	6.9	6.2	1.2	110	0	90	10	12	.1
JUL											
11...	30	41	8.3	6.3	1.2	130	0	110	13	13	.0
AUG											
31...	18	38	7.3	6.1	1.3	130	0	110	15	11	.0
SEP											
28...	36	46	8.8	6.4	1.0	140	0	110	17	14	.0

K Results based on colony count outside the acceptable range (non-ideal colony count).

01509150 GRIDLEY CREEK ABOVE EAST VIRGIL, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)
OCT										
06...	5.3	64	.28	.00	.28	--	--	--	530	10
27...	4.9	85	.50	.00	.50	--	--	--	80	10
NOV										
15...	4.2	69	.48	.00	.48	--	--	--	120	10
DEC										
06...	4.8	65	.52	.00	.52	--	--	--	150	10
JAN										
24...	5.1	94	.69	.00	.69	--	--	--	0	10
FEB										
13...	4.7	91	.70	.00	.70	.51	1.2	.02	40	10
MAR										
21...	4.0	84	.71	.00	.71	--	--	--	2500	70
APR										
11...	3.6	41	.48	.00	.48	--	--	--	770	20
MAY										
09...	3.1	42	.29	.00	.29	--	--	--	1900	50
JUN										
21...	4.6	130	.59	.01	.60	--	--	--	150	20
JUL										
11...	4.5	151	.45	.00	.45	--	--	--	40	10
AUG										
31...	5.1	148	.58	.01	.59	--	--	--	120	0
SEP										
28...	4.9	167	--	--	--	--	--	--	60	0

01510000 OTSELIC RIVER AT CINCINNATUS, NY

LOCATION.--Lat 42°32'28", long 75°53'58", Cortland County, Hydrologic Unit 02050102, on right bank 150 ft (46 m) upstream from Mead Brook, and 300 ft (91 m) downstream from bridge on County Highway 159 at Cincinnatus.

DRAINAGE AREA.--147 mi^2 (381 km^2).

PERIOD OF RECORD.--June 1938 to September 1964, October 1969 to current year.

REVISED RECORDS.--WSP 2103: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,031.67 ft (314.328 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--35 years (1939-64, 1970-78), 276 ft^3/s (7.816 m^3/s), 25.50 in/yr (648 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,390 ft^3/s (238 m^3/s) Dec. 30, 1942; maximum gage height, 10.68 ft (3.255 m) Apr. 4, 1950; minimum discharge, 3.8 ft^3/s (0.11 m^3/s) Sept. 25, 1939; minimum gage height, 0.35 ft (0.107 m) Sept. 5, 1973 (result of regulation).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,500 ft^3/s (70.8 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 17	1745	3,400	96.3	7.49	2.283	Jan. 26	0915	2,850	80.7	6.87	2.094
Dec. 15	0130	2,620	74.2	6.59	2.009	Apr. 2	0130	*3,460	98.0	7.56	2.304
Jan. 9	Unknown	ice jam		*a7.61	2.320	Apr. 5	1100	3,060	86.7	7.12	2.170

a Backwater from ice.

Minimum daily discharge, 25 ft^3/s (0.71m^3/s) July 25, 26, Sept. 9, 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	905	135	1290	160	416	96	2140	163	68	46	44	31
2	1320	125	1160	150	381	94	2480	156	64	43	41	29
3	931	118	752	140	324	92	1290	141	126	44	51	28
4	815	223	576	140	270	90	1100	128	98	52	184	27
5	554	337	428	130	250	90	2690	136	78	49	79	27
6	492	234	428	130	230	90	1520	196	72	42	67	27
7	381	331	367	120	220	90	1810	182	76	38	72	26
8	300	1520	306	120	210	88	1640	156	117	36	184	26
9	980	1080	285	1700	200	88	1040	297	121	36	100	25
10	1030	910	255	1100	190	88	875	283	108	33	110	25
11	626	1740	225	860	180	88	1030	223	80	32	82	26
12	576	964	216	640	170	92	1560	192	66	32	67	65
13	428	693	260	520	160	110	1400	176	132	30	61	45
14	347	527	1110	420	150	131	1200	167	120	31	54	37
15	662	436	2230	350	150	555	825	160	89	47	48	34
16	639	416	1250	320	150	440	644	157	74	39	45	38
17	2660	395	840	290	140	313	527	204	66	46	42	47
18	2320	496	684	260	140	250	448	202	63	34	40	59
19	1490	370	613	240	130	240	444	248	68	30	38	570
20	1040	315	500	230	120	230	572	178	66	28	39	160
21	743	350	476	220	120	285	613	186	71	27	37	110
22	581	398	424	210	110	1080	448	165	144	27	36	95
23	448	312	360	200	110	1140	357	142	95	28	33	82
24	357	344	318	220	110	1110	312	129	73	28	32	73
25	300	291	518	424	110	755	275	121	63	25	31	66
26	262	306	398	2330	100	842	255	108	58	25	30	60
27	231	278	260	1680	100	2010	236	98	59	30	30	56
28	204	267	230	1040	98	1750	216	89	68	83	29	53
29	180	248	210	748	---	1350	198	82	56	54	26	51
30	160	250	190	613	---	1080	182	76	50	47	28	48
31	145	---	180	509	---	1070	---	74	---	50	31	---
TOTAL	22107	14409	17339	16214	5039	15827	28327	5015	2489	1192	1793	2046
MEAN	713	480	559	523	180	511	944	162	83.0	38.5	57.8	68.2
MAX	2660	1740	2230	2330	416	2010	2690	297	144	83	184	570
MIN	145	118	180	120	98	88	182	74	50	25	28	25
CFSM	4.85	3.27	3.80	3.56	1.22	3.48	6.42	1.10	.57	.26	.39	.46
IN.	5.59	3.65	4.39	4.10	1.28	4.01	7.17	1.27	.63	.30	.45	.52

CAL YR 1977 TOTAL 142460 MEAN 390 MAX 5050 MIN 30 CFSM 2.65 IN 36.05
WTR YR 1978 TOTAL 131797 MEAN 361 MAX 2690 MIN 25 CFSM 2.46 IN 33.35

01511000 WHITNEY POINT LAKE AT WHITNEY POINT, NY

LOCATION.--Lat 42°20'34", long 75°57'57", Broome County, Hydrologic Unit 02050102, on left bank at control-gate structure for Whitney Point Dam on Otselic River, 0.3 mi (0.5 km) upstream from spillway, 0.9 mi (1.4 km) upstream from mouth, and 1.0 mi (1.6 km) north of Whitney Point.

DRAINAGE AREA.--257 mi² (666 km²).

PERIOD OF RECORD.--October 1942 to current year.

REVISED RECORDS.--WSP 2103: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to October 1970, published as "Whitney Point Reservoir at Whitney Point."

REMARKS.--Lake is formed by earthfill dam with concrete spillway, completed by Corps of Engineers in 1942 for flood control; first used for flood regulation on Mar. 9, 1942. Usable capacity, 86,440 acre-ft (107 hm³) between elevations 950.0 ft or 289.56 m (sill of gates) and 1,010.0 ft or 307.85 m (crest of spillway). Dead storage, 28 acre-ft (34,500 m³). Figures given herein represent total contents. Discharge is controlled by operation of three gates. Water is stored during high flows and released when downstream conditions warrant. Lake is used for flood control and recreation.

COOPERATION.--Capacity table furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 1,005.0 ft (306.32 m) Mar. 23, 1948, contents, 71,440 acre-ft (88.1 hm³); minimum, 950.4 ft (289.68 m) Sept. 2-4, 1953, contents, 36 acre-ft (44,400 m³).

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 987.96 ft (301.130 m) Oct. 20, contents, 35,300 acre-ft (43.5 hm³); minimum, 964.90 ft (294.102 m) Feb. 5, contents, 4,174 acre-ft (5.15 hm³).

Capacity table (elevation, in feet, and usable contents, in acre-feet)
(Based on field survey by Corps of Engineers in 1937)

960.0	1,250	980.0	22,240
965.0	4,260	985.0	30,200
970.0	9,270	990.0	38,980
975.0	15,290	1,000.0	59,220

ELEVATION, IN FEET ABOVE NGVD, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	985.26	972.86	973.53	966.38	969.78	965.79	973.89	966.11	973.15	973.19	973.02	972.89
2	982.20	972.85	974.81	966.47	967.12	965.89	978.33	966.39	973.25	973.19	973.03	972.89
3	982.63	972.86	973.68	966.38	966.31	966.00	981.26	966.77	973.35	973.20	973.04	972.88
4	980.62	973.10	971.88	966.10	965.65	966.09	980.83	967.11	973.22	973.26	973.21	972.87
5	978.11	974.02	969.89	965.88	965.12	966.22	982.10	967.52	973.01	973.28	973.41	972.85
6	975.47	973.67	967.99	965.86	965.91	966.30	985.15	968.12	972.91	973.26	973.18	972.86
7	973.50	973.34	966.66	965.98	966.15	966.35	986.22	968.84	972.92	973.23	972.99	972.89
8	972.91	974.68	966.10	966.06	966.24	966.28	987.68	969.41	973.20	973.20	973.02	972.92
9	973.35	975.66	966.01	969.59	966.27	966.19	986.93	970.21	973.48	973.16	973.26	972.94
10	975.10	974.19	966.08	975.18	966.15	966.12	984.53	971.58	973.25	973.12	973.06	972.96
11	974.46	974.40	966.01	974.59	965.99	966.06	981.98	972.49	973.06	973.07	973.03	972.97
12	973.16	973.98	965.84	972.18	965.84	966.01	980.34	972.90	973.02	973.00	973.00	973.00
13	972.79	972.49	965.96	969.61	965.87	966.00	978.94	972.77	973.09	972.94	972.95	973.10
14	972.92	972.65	966.52	967.14	966.27	966.12	977.24	972.62	973.23	972.97	972.97	973.16
15	973.33	972.75	970.79	965.80	966.31	966.64	975.11	972.76	973.20	973.06	973.01	973.15
16	973.53	972.76	975.91	965.77	966.18	966.96	972.44	972.91	973.06	973.19	973.04	973.11
17	975.93	972.82	976.82	965.86	966.09	966.04	969.68	973.13	972.90	973.39	973.06	973.05
18	982.11	973.01	976.73	965.87	966.00	965.80	967.22	973.38	972.79	973.29	973.07	972.99
19	985.71	973.16	976.22	965.90	965.84	965.78	965.86	973.44	972.88	973.14	973.08	973.43
20	987.65	973.06	974.29	965.98	965.67	965.82	965.80	973.29	972.97	972.98	973.08	973.57
21	987.43	972.88	971.44	965.90	965.70	965.95	966.36	973.09	973.07	972.94	973.07	972.84
22	985.96	972.88	968.80	965.87	965.76	968.30	966.29	973.17	973.23	973.00	973.06	972.99
23	983.34	972.81	966.64	965.97	965.79	969.44	965.91	973.25	973.40	973.05	973.05	973.05
24	980.35	972.72	965.67	965.98	965.82	970.98	965.73	973.30	973.29	973.09	973.03	973.05
25	977.00	972.76	965.76	966.05	965.83	969.88	965.83	973.30	973.10	973.11	973.01	973.03
26	973.70	972.80	966.56	967.47	965.85	968.16	965.94	973.27	972.94	973.14	972.99	972.98
27	972.44	972.84	966.36	973.69	965.85	969.02	966.00	973.22	972.98	973.19	972.96	973.03
28	972.48	972.81	966.05	977.06	965.83	973.35	966.01	973.13	973.07	973.28	972.93	973.10
29	972.65	972.74	965.75	977.21	---	975.59	966.05	973.03	973.13	973.22	972.92	973.13
30	972.77	972.64	965.93	975.53	---	975.83	966.09	972.94	973.17	973.13	972.90	973.14
31	972.83	---	966.23	972.78	---	974.55	---	973.03	---	973.00	972.87	---
MEAN	977.47	973.21	969.26	968.59	966.21	967.87	974.06	971.50	973.11	973.14	973.04	973.03
MAX	987.65	975.66	976.82	977.21	969.78	975.83	987.68	973.44	973.48	973.39	973.41	973.57
MIN	972.44	972.49	965.67	965.77	965.12	965.78	965.73	966.11	972.79	972.94	972.87	972.84
†	12,505	12,253	5,550	10,656	5,034	13,803	5,294	12,812	12,914	12,685	12,541	12,876
‡	-324	-4.2	-109	+83.0	-101	+143	-143	+122	+1.7	-3.7	-2.3	+5.6

CAL YR 1977 MEAN 972.72 MAX 998.08 MIN 965.67 ‡ + 0.4
WTR YR 1978 MEAN 971.73 MAX 987.68 MIN 965.12 ‡ -27.0

† CONTENTS, IN ACRE-FEET, AT END OF MONTH.
‡ CHANGE IN CONTENTS, EQUIVALENT IN CUBIC FEET PER SECOND.

01512500 CHENANGO RIVER NEAR CHENANGO FORKS, NY

LOCATION.--Lat 42°13'05", long 75°50'55", Broome County, Hydrologic Unit 02050102, on left bank in Chenango Valley State Park, and 1.2 mi (1.9 km) downstream from Tioughnioga River and village of Chenango Forks.

DRAINAGE AREA.--1,483 mi² (3,841 km²).

PERIOD OF RECORD.--November 1912 to current year.

GAGE.--Water-stage recorder. Datum of gage is 871.73 ft (265.703 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Nov. 11, 1912 to Oct. 1, 1914, nonrecording gage and Oct. 2, 1914 to Aug. 2, 1936, water-stage recorder at site 300 ft (91 m) upstream at same datum.

REMARKS.--Records good except those for winter periods and those for period of no gage-height record, Nov. 29 to Jan. 9, which are poor. Since March 1942, flood flows partly regulated by Whitney Point Lake (see station 01511000). Slight diversion from upstream tributaries for operation of Erie (Barge) Canal.

AVERAGE DISCHARGE.--65 years (1913-78), 2,440 ft³/s (69.10 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 96,000 ft³/s (2,720 m³/s) July 8, 1935, gage height, 20.3 ft (6.19 m), from floodmarks, from rating curve extended above 32,000 ft³/s (906 m³/s) on basis of slope-area measurement of peak flow; minimum, 84 ft³/s (2.38 m³/s) Sept. 19, 25, 1939, gage height, 2.24 ft (0.683 m).

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 18,000 ft³/s (510 m³/s):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 18	0400	18,000	510	9.47	2.886

Minimum discharge, 234 ft³/s (6.62 m³/s) Sept. 10, 11, 12, gage height, 2.61 ft (0.796 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7870	2020	6980	2500	4700	1100	13100	1690	858	546	565	364
2	10600	1910	10400	2300	4000	1000	16500	1460	800	509	509	342
3	9610	1760	8500	2200	3500	1000	13400	1360	979	499	491	327
4	9100	1900	6980	2200	3000	980	10900	1270	1200	553	720	305
5	8050	3820	5880	2100	2600	960	15200	1240	1060	579	1180	285
6	6660	3560	5280	2000	2300	960	13900	1710	855	542	1270	265
7	5410	2940	4670	1900	2300	980	13900	1870	827	508	1320	258
8	3650	8650	3780	1800	2300	980	13900	1710	1490	485	1270	252
9	5100	9790	3360	11600	2200	960	11700	2370	1770	463	1560	246
10	8190	7720	3100	11500	2100	980	9990	3150	1920	455	1480	234
11	6730	12300	2800	9450	1900	1000	9520	2420	1260	466	1310	234
12	5670	10700	2500	8630	1800	1000	12100	2220	959	443	1070	234
13	4570	7440	2600	7270	1700	1100	11500	2200	1230	406	931	327
14	3620	5190	4820	6050	1600	1440	10300	1980	1640	352	730	397
15	5970	4510	12600	4200	1500	4200	8830	1730	1270	802	670	405
16	6510	4180	11700	3500	1500	5060	7370	1700	1040	666	593	380
17	14300	3960	8860	3000	1500	4010	6250	1970	935	836	555	397
18	17400	4640	7100	2700	1500	3180	5230	2080	835	833	528	447
19	14400	4090	6820	2600	1400	2970	4220	2260	1080	621	491	2010
20	12000	3570	6820	2500	1300	2970	4190	2090	1050	528	465	3290
21	9740	3390	6590	2400	1300	3650	5390	1920	856	380	447	1840
22	8340	3640	6140	2300	1200	9680	4570	1700	965	349	430	1080
23	7750	3350	5080	2300	1200	10200	3750	1540	1250	320	405	920
24	6980	3220	4040	2200	1200	11800	3200	1440	1080	285	380	770
25	6360	3050	4280	2400	1100	9110	2810	1370	936	278	372	690
26	5520	3030	4720	8030	1200	7710	2600	1290	794	278	356	621
27	3480	3010	3780	12300	1100	13100	2420	1220	651	285	356	528
28	2860	2880	3200	11100	1100	15600	2200	1160	657	413	342	491
29	2550	2840	2800	8890	---	13500	2010	1110	655	833	334	465
30	2350	2810	2600	7140	---	11500	1900	995	602	740	327	438
31	2160	---	2500	6000	---	10900	---	875	---	650	349	---
TOTAL	223500	135870	171280	155070	54100	153680	242850	53120	31504	15903	21806	18842
MEAN	7210	4529	5525	5002	1932	4957	8095	1714	1050	513	703	628
MAX	17400	12300	12600	12300	4700	15600	16500	3150	1920	836	1560	3290
MIN	2160	1760	2500	1800	1100	960	1900	875	602	278	327	234

CAL YR 1977 TOTAL 1342218 MEAN 3677 MAX 28900 MIN 298
WTR YR 1978 TOTAL 1277525 MEAN 3500 MAX 17400 MIN 234

01513110 SUSQUEHANNA RIVER AT JOHNSON CITY, NY

LOCATION.--Lat 42°06'37", long 75°58'30", Broome County, Hydrologic Unit 02050103, at intake of the New York State Electric and Gas Corp., Goudey Station, at Johnson City, 100 ft (30 m) upstream from Little Choconut Creek, 0.5 mi (0.8 km) downstream from C.F.J. Memorial Bridge, 3.5 mi (5.6 km) downstream from Chenango River and 4.8 mi (7.7 km) upstream from discontinued discharge station (01513500) at Vestal.

DRAINAGE AREA.--3,891 mi² (10,078 km²), below mouth of Chenango River.

PERIOD OF RECORD.--Water years 1956 to current year. Prior to October 1960, published as 01513500, "at Johnson City", and prior to October 1967, published as 01513500, "at Vestal"; however, all water-temperature records were collected at present site.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1955 to current year.

REMARKS.--Daily water-temperature measurements made at 0800 hours. During winter periods water is at times recirculated from inside the plant through the intake to prevent icing conditions, thus resulting in reported water temperatures that are slightly above actual river temperatures.

COOPERATION.--Water-temperature records furnished by the New York State Electric and Gas Corp.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum daily, 28.0°C July 29, 1963, Aug. 18, 1965, and July 18, 1968; minimum daily, freezing point on many days during winter periods, except 1967, 1976, and 1978.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum daily, 27.0°C July 22, 23, 24; minimum daily, 1.0°C on many days during winter period.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
(ONCE DAILY AT 0800)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13.0	7.0	4.0	1.0	1.0	1.0	4.0	9.0	24.0	22.0	19.0	21.0
2	13.0	9.0	4.0	1.0	1.0	1.0	4.0	8.0	23.0	21.0	22.0	21.0
3	12.0	10.0	4.0	2.0	1.0	1.0	2.0	9.0	23.0	22.0	24.0	22.0
4	13.0	12.0	3.0	2.0	1.0	1.0	4.0	10.0	19.0	18.0	24.0	21.0
5	11.0	12.0	2.0	2.0	1.0	1.0	4.0	11.0	19.0	19.0	21.0	20.0
6	12.0	12.0	1.0	3.0	1.0	1.0	3.0	9.0	18.0	21.0	23.0	21.0
7	11.0	12.0	1.0	3.0	1.0	1.0	4.0	9.0	20.0	23.0	22.0	23.0
8	11.0	11.0	1.0	3.0	1.0	1.0	5.0	9.0	18.0	25.0	22.0	22.0
9	10.0	9.0	1.0	2.0	1.0	1.0	3.0	11.0	18.0	25.0	22.0	19.0
10	11.0	10.0	1.0	1.0	1.0	1.0	3.0	12.0	17.0	25.0	22.0	18.0
11	10.0	9.0	1.0	1.0	1.0	1.0	5.0	11.0	19.0	23.0	22.0	18.0
12	10.0	6.0	1.0	1.0	1.0	1.0	9.0	13.0	22.0	21.0	22.0	19.0
13	9.0	4.0	1.0	1.0	1.0	1.0	7.0	14.0	22.0	22.0	22.0	18.0
14	9.0	5.0	1.0	1.0	1.0	1.0	8.0	13.0	17.0	24.0	24.0	17.0
15	8.0	4.0	1.0	1.0	1.0	3.0	7.0	13.0	16.0	24.0	25.0	18.0
16	8.0	4.0	3.0	1.0	1.0	4.0	6.0	13.0	18.0	26.0	26.0	18.0
17	8.0	6.0	4.0	1.0	1.0	1.0	6.0	13.0	19.0	24.0	26.0	17.0
18	6.0	6.0	4.0	1.0	1.0	1.0	7.0	13.0	18.0	22.0	24.0	18.0
19	6.0	6.0	3.0	1.0	1.0	1.0	8.0	13.0	22.0	24.0	24.0	18.0
20	6.0	4.0	3.0	1.0	1.0	1.0	7.0	16.0	20.0	25.0	25.0	17.0
21	7.0	5.0	3.0	1.0	1.0	2.0	9.0	18.0	22.0	26.0	22.0	17.0
22	8.0	4.0	3.0	1.0	1.0	2.0	8.0	16.0	22.0	27.0	23.0	17.0
23	7.0	4.0	2.0	1.0	1.0	2.0	7.0	17.0	21.0	27.0	23.0	16.0
24	7.0	5.0	2.0	1.0	1.0	2.0	8.0	18.0	20.0	27.0	24.0	16.0
25	7.0	4.0	2.0	1.0	1.0	2.0	9.0	17.0	21.0	25.0	24.0	17.0
26	8.0	4.0	1.0	1.0	1.0	2.0	10.0	19.0	22.0	23.0	22.0	16.0
27	9.0	2.0	1.0	1.0	1.0	2.0	11.0	22.0	21.0	24.0	22.0	12.0
28	11.0	2.0	1.0	1.0	1.0	2.0	11.0	22.0	24.0	24.0	23.0	16.0
29	10.0	5.0	1.0	1.0	---	2.0	11.0	24.0	23.0	22.0	23.0	12.0
30	9.0	3.0	1.0	1.0	---	5.0	11.0	23.0	24.0	21.0	23.0	14.0
31	7.0	---	1.0	1.0	---	2.0	---	25.0	---	21.0	23.0	---
MEAN	9.5	6.5	2.0	1.5	1.0	1.5	6.5	14.5	20.5	23.5	23.0	18.0

WTR YR 1978 MEAN 10.5 MAX 27.0 MIN 1.0

01514000 OWEGO CREEK NEAR OWEGO, NY

LOCATION.--Lat 42°07'40", long 76°16'17", Tioga County, Hydrologic Unit 02050103, on right bank 300 ft (91 m) upstream from bridge on State Highway 96, 0.5 mi (0.8 km) upstream from Catatonk Creek, and 1.5 mi (2.4 km) north of Owego.

DRAINAGE AREA.--185 mi² (479 km²).

PERIOD OF RECORD.--January 1930 to September 1978 (discontinued).

REVISED RECORDS.--WSP 2103: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 819.82 ft (249.881 m) National Geodetic Vertical Datum of 1929. Prior to July 8, 1935, water-stage recorder, and July 9, 1935 to Sept. 30, 1936, nonrecording gage at site 250 ft (76 m) downstream, and Oct. 1, 1936 to Oct. 1, 1962, water-stage recorder at present site at datum 1.00 ft (0.305 m) higher.

REMARKS.--Records poor.

AVERAGE DISCHARGE.--48 years, 280 ft³/s (7.930 m³/s), 20.55 in/yr (522 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 23,500 ft³/s (666 m³/s) July 8, 1935, gage height, 11.50 ft (3.505 m) present datum, from floodmarks, from rating curve extended above 7,800 ft³/s (221 m³/s) on basis of slope-area measurement of peak flow; minimum, 8.1 ft³/s (0.23 m³/s) Aug. 13, 1965; minimum gage height, 0.21 ft (0.064 m) Aug. 21, 1974.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,800 ft³/s (108 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 17	1330	*5,700	161	*7.62	2.323
Jan. 9	0900	5,420	153	7.35	2.240
Jan. 26	1900	3,830	108	6.06	1.847
Mar. 27	1800	4,060	115	6.30	1.920

Minimum daily discharge, 13 ft³/s (0.37 m³/s) Sept. 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	594	234	1570	300	400	130	2190	156	47	39	25	24
2	1030	225	1120	260	350	130	2600	152	44	37	23	21
3	733	218	701	240	320	120	1190	145	54	35	26	19
4	747	390	550	230	290	120	879	135	54	42	35	18
5	491	1010	443	240	270	110	2630	149	42	42	31	18
6	447	443	447	230	280	110	1460	210	38	37	167	16
7	371	541	403	250	270	100	2230	198	39	36	135	16
8	306	1850	373	300	260	100	1880	171	109	37	103	20
9	746	957	368	3540	250	100	935	305	171	34	65	19
10	747	749	377	1340	240	120	628	305	142	32	58	17
11	437	2140	385	811	230	150	698	236	103	31	58	18
12	413	964	364	560	220	180	1280	210	73	30	45	15
13	339	725	390	470	200	250	894	198	112	28	41	14
14	295	585	1350	420	190	380	741	190	135	29	37	13
15	402	507	2450	370	180	1260	462	182	109	41	35	18
16	548	517	1320	330	170	813	340	178	103	41	33	19
17	4660	471	909	310	180	544	281	219	86	37	31	19
18	2430	521	749	290	170	430	249	202	73	32	29	24
19	1670	411	749	280	150	400	236	199	103	27	27	27
20	1640	364	606	280	140	420	320	174	73	25	27	38
21	916	348	580	260	130	1090	523	174	75	25	26	32
22	632	340	536	260	130	2410	310	167	115	26	24	25
23	475	324	475	260	140	2080	253	156	75	23	23	21
24	377	320	438	280	140	1830	231	149	60	23	22	20
25	332	309	672	320	130	1050	219	145	54	23	21	20
26	309	316	470	2300	130	980	206	135	51	21	19	20
27	294	313	400	2340	130	2930	190	122	49	20	19	18
28	279	305	320	1120	130	2420	178	97	44	27	19	20
29	268	301	310	743	---	1790	171	78	39	31	19	21
30	258	309	330	540	---	1250	163	63	39	27	20	18
31	244	---	340	450	---	1200	---	54	---	26	24	---
TOTAL	23430	17007	20445	19924	5820	24997	24567	5253	2311	964	1267	608
MEAN	756	567	661	643	208	806	819	169	77.0	31.1	40.9	20.3
MAX	4660	2140	2450	3540	400	2930	2630	305	171	42	167	38
MIN	244	218	310	230	130	100	163	54	38	20	19	13
CFSM	4.09	3.07	3.57	3.48	1.12	4.36	4.43	.91	.42	.17	.22	.11
IN.	4.71	3.42	4.12	4.01	1.17	5.03	4.94	1.05	.46	.19	.25	.12

CAL YR 1977 TOTAL 147233 MEAN 403 MAX 4660 MIN 14 CFSM 2.18 IN 29.61
WTR YR 1978 TOTAL 146643 MEAN 402 MAX 4660 MIN 13 CFSM 2.17 IN 29.49

01515000 SUSQUEHANNA RIVER NEAR WAVERLY, NY

LOCATION.--Lat 41°59'05", long 76°30'05", Bradford County, Pa., Hydrologic Unit 02050103, on left bank 0.2 mi (0.3 km) upstream from Cayuta Creek, 0.4 mi (0.6 km) upstream from bridge on East Lockhart Street at Sayre, Pa., 1 mi (2 km) downstream from New York-Pennsylvania State line, and 2 mi (3 km) southeast of Waverly.

DRAINAGE AREA.--4,773 mi² (12,362 km²).

PERIOD OF RECORD.--February 1937 to current year.

REVISED RECORDS.--WSP 2103: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 743.96 ft (226.759 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to November 1939, at datum 1.0 ft (0.30 m) higher.

REMARKS.--Records good except those for winter periods, which are fair. Minor regulation by upstream lakes and reservoirs. Slight diversion from upstream tributaries for operation of Erie (Barge) Canal.

AVERAGE DISCHARGE.--41 years, 7,668 ft³/s (217.2 m³/s), 21.82 in/yr (554 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 121,000 ft³/s (3,430 m³/s) June 23, 1972, gage height, 21.24 ft (6.474 m); minimum daily, 237 ft³/s (6.71 m³/s) Sept. 22, 23, 1964; minimum gage height, 0.52 ft (0.158 m) Sept. 24, 25, 1939.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1936 reached a stage of about 21.4 ft (6.52 m), from flood profile (discharge, 128,000 ft³/s or 3,620 m³/s).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 52,000 ft³/s (1,470 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 18	0200	*70,300	1,990	*15.16	4.621	Jan. 27	0400	58,400	1,650	13.49	4.112
Jan. 9	2100	55,400	1,570	13.06	3.981	Mar. 28	0700	52,500	1,490	12.58	3.834

Minimum discharge, 670 ft³/s (19.0 m³/s) Sept. 14, gage height, 0.98 ft (0.299 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21500	7370	20600	8600	16000	3100	35500	5830	3070	1830	1430	1200
2	25700	6820	30100	7800	13000	3000	47000	5340	2890	1660	1260	1220
3	27900	6370	30200	6800	10000	2800	43600	4870	2840	1530	1190	1100
4	27500	6150	24600	6400	8600	2600	37100	4510	3100	1610	2020	999
5	22800	10900	19700	5800	7000	2600	40600	4540	3460	2490	1990	930
6	18800	11100	16600	6840	5000	2500	40900	6140	3400	2170	8700	866
7	16700	10500	15000	7160	5000	2500	41200	7000	3020	1770	11100	798
8	14100	17200	13000	6540	5800	2500	42000	6690	3540	1600	8620	781
9	12600	27200	11000	37900	6400	2600	35900	7310	5680	1450	6160	797
10	19300	23800	10000	47500	6600	2600	28600	9910	6650	1340	5600	745
11	20500	35000	9000	34400	6200	2800	24500	9120	6150	1250	5060	720
12	17000	38600	8000	24000	6000	3100	27500	7770	4930	1240	3960	709
13	14300	31900	7390	21000	5600	3200	28700	6910	4290	1170	3650	694
14	12300	23300	13700	18000	5400	4200	27000	6460	5570	1090	2840	691
15	15600	17800	38700	14000	5200	13800	24000	6010	5250	1000	2310	793
16	26300	15500	41100	11000	5000	18700	20500	5630	4360	1240	1980	865
17	55500	14100	33800	9800	4700	16900	17300	7510	3600	1470	1740	899
18	65200	14300	26200	8400	4500	13200	14800	7800	3110	1680	1550	906
19	58500	14300	22600	8000	4300	11500	12900	7760	3510	1650	1410	973
20	63000	13400	19500	7200	4100	11900	11800	7760	4330	1440	1290	2860
21	50100	11700	18200	6800	3900	15100	14900	7400	4230	1320	1190	7200
22	34300	11000	17600	6600	3700	36800	16000	6850	4220	1210	1120	5430
23	26300	10900	16100	6400	3600	41600	13500	5710	3810	1010	1060	3520
24	21900	10500	13500	6200	3500	44400	11300	5640	3900	920	1010	2880
25	19200	9870	13800	7000	3600	34900	9900	5410	3560	861	974	2370
26	17200	9560	16000	24900	3500	26200	8970	5000	2900	811	927	2050
27	15000	9740	14000	55100	3400	36300	8270	4530	2510	775	891	1800
28	11900	9700	11000	42400	3200	51900	7620	4160	2200	822	877	1580
29	9900	9460	9000	31100	---	50000	6980	3880	2070	908	878	1440
30	8870	9500	8000	22800	---	41100	6340	3610	1990	1330	886	1330
31	8070	---	9000	18000	---	34300	---	3310	---	1390	930	---
TOTAL	777840	447540	556990	524490	163800	538700	705380	190370	114140	42037	84603	49146
MEAN	25090	14920	17970	16920	5850	17380	23510	6141	3805	1356	2729	1638
MAX	65200	38600	41100	55100	15000	51900	47000	9910	6650	2490	11100	7200
MIN	8070	6150	7390	5800	3200	2500	6340	3310	1990	775	677	691
CFSM	5.26	3.13	3.77	3.55	1.23	3.64	4.93	1.29	.80	.28	.57	.34
IN.	6.06	3.49	4.34	4.09	1.28	4.20	5.50	1.48	.89	.33	.66	.38

CAL YR 1977 TOTAL 4365679 MEAN 11960 MAX 68500 MIN 856 CFSM 2.51 IN 34.03
WTR YR 1978 TOTAL 4195036 MEAN 11490 MAX 65200 MIN 691 CFSM 2.41 IN 32.70

01520500 TIOGA RIVER AT LINDLEY, NY

LOCATION.--Lat 42°01'44", long 77°07'57", Steuben County, Hydrologic Unit 02050104, on left bank just downstream from bridge on County Highway 120 at Lindley, and 6 mi (10 km) upstream from Canisteo River. Water-quality sampling site at discharge station.

DRAINAGE AREA.--771 mi² (1,997 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1930 to current year.

REVISED RECORDS.--WSP 871: 1938. WSP 2103: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 964.50 ft (293.980 m) National Geodetic Vertical Datum of 1929. Prior to Feb. 9, 1937, nonrecording gage on bridge at same datum.

REMARKS.--Records fair except those for winter period and those prior to Dec. 15, which are poor.

AVERAGE DISCHARGE.--48 years, 806 ft³/s (22.83 m³/s), 14.20 in/yr (361 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 128,000 ft³/s (3,620 m³/s) June 23, 1972, gage height, 26.27 ft (8.007 m), from floodmark in gage house, from rating curve extended above 31,000 ft³/s (878 m³/s) on basis of velocity-area and slope-area studies at gage height 19.2 ft (5.85 m) and conveyance study and slope-area measurements at gage heights 22.87 ft (6.971 m) and 26.27 ft (8.007 m); minimum, 6.1 ft³/s (0.17 m³/s) Sept. 1, 1939; minimum gage height, 2.80 ft (0.853 m) Sept. 11, 12, 1930.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 10,200 ft³/s (289 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Nov. 5	0600	13,500	382	13.60	4.145	Mar. 22	0230	22,500	637	15.84	4.828
Nov. 7	1900	12,900	365	13.36	4.072	Mar. 27	1930	10,600	300	11.81	3.600
Nov. 11	0330	12,400	351	13.14	4.005	Apr. 1	2400	10,200	289	11.64	3.548
Dec. 14	2230	13,000	368	13.09	3.990	May 14	2330	20,800	589	15.45	4.709
Jan. 9	0830	*23,300	660	*16.01	4.880	May 17	0700	12,000	340	12.45	3.795
Jan. 26	1600	a12,100	343	a12.5	3.81						

a About.

Minimum discharge, 72 ft³/s (2.04 m³/s) Aug. 28, gage height, 3.04 ft (0.927 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	696	451	3530	660	1000	300	5680	489	478	121	173	346
2	1360	419	2010	600	860	300	6980	446	419	112	138	203
3	841	409	1430	540	780	290	3940	404	814	112	178	136
4	703	3090	1280	490	740	290	3370	354	684	159	695	119
5	563	9320	1000	450	700	290	5080	586	505	195	332	106
6	489	3620	920	490	660	290	3460	841	430	151	1960	91
7	483	6650	840	540	580	290	4120	622	374	120	2350	81
8	399	8750	760	680	560	290	3750	522	897	107	1690	81
9	659	4880	660	14000	540	280	2760	598	991	142	874	131
10	976	4010	620	4350	520	280	2210	781	747	144	594	109
11	604	8010	700	2100	500	320	1910	622	530	106	438	131
12	511	3810	780	1500	480	380	2260	528	431	95	354	150
13	456	2640	1000	1200	470	450	1780	634	602	84	524	178
14	409	1930	5100	960	460	1000	1420	8830	517	235	308	147
15	563	1610	10400	880	440	7200	1170	10100	379	439	226	108
16	1450	1370	5210	820	430	4980	1020	4640	310	176	188	99
17	4780	1820	3590	760	430	2970	904	8270	271	266	166	93
18	3870	1820	3940	700	410	2060	787	4370	263	158	140	94
19	3700	1270	4080	640	390	2200	814	3390	469	112	123	822
20	4330	1060	2980	640	380	3180	1740	2320	382	91	118	689
21	3190	969	2920	580	370	7760	2610	2060	283	117	103	390
22	2360	904	2640	540	360	15000	1650	1600	447	157	78	298
23	1700	807	2050	540	350	11000	1270	1270	286	129	84	240
24	1290	794	1700	550	340	7850	1130	1640	215	106	83	197
25	1070	728	3520	1500	330	4410	983	1720	185	92	82	168
26	918	735	2300	6400	320	3460	869	1170	167	93	80	145
27	814	640	1200	7400	320	6810	781	983	159	83	75	126
28	735	592	1000	4000	310	6370	690	835	184	101	75	114
29	634	551	860	2600	---	5780	616	728	182	108	94	105
30	563	610	800	1600	---	4560	557	598	143	143	88	97
31	500	---	720	1300	---	4000	---	539	---	163	113	---
TOTAL	41616	74269	70540	60090	14030	104640	66511	62490	12744	4417	12524	5794
MEAN	1342	2476	2275	1938	501	3375	2217	2016	425	142	404	193
MAX	4780	9320	10400	14000	1000	15000	6980	10100	991	439	2350	822
MIN	399	409	620	460	310	280	557	354	143	83	75	81
CFSM	1.74	3.21	2.95	2.51	.65	4.38	2.88	2.62	.55	.18	.52	.25
IN.	2.01	3.58	3.40	2.90	.68	5.05	3.21	3.02	.61	.21	.60	.28

CAL YR 1977 TOTAL 394246 MEAN 1080 MAX 10400 MIN 47 CFSM 1.40 IN 19.02
WTR YR 1978 TOTAL 529665 MEAN 1451 MAX 15000 MIN 75 CFSM 1.88 IN 25.56

01520500 TIOGA RIVER AT LINDLEY, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1964-67, 1971 to current year.
CHEMICAL DATA: 1964 (b), 1965 (c), 1966 (a), 1971-73 (a), 1974-77 (d).
MINOR ELEMENTS DATA: 1973 (a), 1974 (c), 1975-76 (a).
PESTICIDE DATA: 1975-76 (a).
ORGANIC DATA: TOC--1975-76 (a).
PCB--1975-76 (a).
NUTRIENT DATA: 1974-75 (d), 1976-77 (b).
SEDIMENT DATA: 1963-64 (b), 1967 (e), 1975-77 (d), 1978 (d).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: August 1974 to July 1977.
WATER TEMPERATURES: August 1974 to September 1977.
SUSPENDED-SEDIMENT DISCHARGE: August 1974 to current year.

REMARKS.--Records affected by upstream construction. Daily mean concentrations during low-flow periods determined from once-daily samples.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum daily mean, 3,100 mg/L Mar. 13, 1977; minimum daily mean, 1 mg/L June 30, July 1, 2, 1975, Sept. 28, 1978.
SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 194,000 tons (176,000 Mg) Sept. 26, 1975; minimum daily, 0.31 ton (0.28 Mg) Sept. 28, 1978.

EXTREMES FOR CURRENT YEAR.--
SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum daily mean, 2,080 mg/L Mar. 22; minimum daily mean, 1 mg/L Sept. 28.
SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 106,000 tons (96,200 Mg) Mar. 22; minimum daily, 0.31 ton (0.28 Mg) Sept. 28.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM
MAR , 1977												
13...	1340	10800	7590	221000	--	30	42	59	76	93	97	100
JUL												
08...	0935	3320	1900	17000	--	54	73	89	90	99	100	--
SEP												
14...	1255	3820	2720	28100	--	50	68	80	91	98	99	100
25...	1130	12100	2630	85900	--	57	72	83	90	96	99	100
NOV												
04...	2315	9570	1740	45000	--	37	50	66	80	92	97	100
07...	2130	12100	710	23200	--	45	58	71	83	89	96	99
DEC												
14...	1900	11600	2330	73000	--	26	37	49	61	79	92	99
JAN , 1978												
09...	1150	18600	612	30700	--	52	67	77	84	87	93	99
MAR												
21...	1800	12600	3550	121000	13	19	28	38	48	59	73	94
27...	2230	9850	482	12800	16	22	31	42	54	70	80	98
MAY												
14...	2215	20600	1620	90100	27	37	51	66	68	88	100	--
17...	1020	10000	455	12300	24	35	47	61	79	83	92	99

01520500 TIOGA RIVER AT LINDLEY, NY--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (T/DAY)
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	19	41	33	40	244	2720	15	27	24	65	15	12
2	114	461	37	42	40	217	14	23	21	49	12	9.7
3	45	102	54	60	25	97	13	19	19	40	11	8.6
4	22	42	571	10300	19	66	12	16	28	56	16	13
5	60	91	558	15800	16	43	11	14	19	36	9	7.0
6	23	30	130	1270	28	70	11	15	26	46	15	12
7	33	43	674	18600	27	61	12	17	18	28	16	13
8	17	18	385	9770	18	37	66	121	16	24	8	6.3
9	74	268	119	1570	14	25	738	3220	15	22	14	11
10	100	291	234	4060	13	22	145	1700	15	21	8	6.0
11	56	91	411	11500	24	45	64	363	8	11	14	12
12	32	44	135	1390	44	93	38	154	12	16	10	10
13	14	17	89	634	32	86	35	113	15	19	14	17
14	10	11	62	323	1030	23300	38	98	16	20	221	597
15	26	40	46	200	585	16400	31	74	16	21	553	10800
16	190	1560	34	126	113	1590	25	55	20	23	295	3970
17	302	3900	104	547	58	562	21	43	20	23	130	1040
18	110	1150	74	364	94	1000	17	32	13	14	68	378
19	92	919	29	99	50	551	14	24	14	15	109	647
20	145	1700	24	69	28	225	11	19	16	16	165	1420
21	67	577	21	55	28	221	13	20	13	13	1780	74400
22	31	198	27	66	25	178	9	14	18	17	2080	106000
23	23	106	18	39	16	89	8	12	11	10	905	29800
24	19	66	18	39	19	87	7	11	15	14	380	8050
25	18	52	15	29	126	1470	7	29	15	13	130	1550
26	24	59	15	30	38	236	799	21500	11	9.5	80	747
27	30	66	17	29	28	91	430	8590	16	14	556	13600
28	24	48	15	24	25	67	67	724	9	7.5	499	9140
29	22	38	9	13	24	56	44	309	---	---	400	6240
30	160	233	14	23	22	48	35	151	---	---	130	1600
31	194	267	---	---	16	31	31	109	---	---	112	1210
TOTAL	---	12549	---	77161	---	49784	---	37615	---	663.0	---	271326.6

DAY	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (T/DAY)
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	550	12400	9	12	11	14	7	2.3	32	15	16	15
2	511	12200	10	12	7	7.9	3	.91	27	10	14	7.7
3	55	585	11	12	91	220	2	.60	48	31	7	2.6
4	60	546	7	6.7	18	33	4	1.7	127	267	7	2.2
5	149	2160	21	33	10	14	7	3.7	48	43	6	1.7
6	44	411	19	43	8	9.3	5	2.0	919	8900	5	1.2
7	81	932	8	13	14	14	5	1.6	279	1850	6	1.3
8	38	385	7	9.9	41	99	5	1.4	150	684	7	1.5
9	24	179	18	29	32	86	9	3.5	55	130	8	2.8
10	28	167	31	65	11	22	11	4.3	29	47	7	2.1
11	32	165	17	29	9	13	4	1.1	25	30	8	2.8
12	34	207	11	16	6	7.0	5	1.3	29	28	8	3.2
13	16	77	12	21	7	11	2	.45	94	146	8	3.8
14	18	69	1680	70800	10	14	482	1180	20	17	11	4.4
15	12	38	581	20100	7	7.2	183	245	11	6.7	9	2.6
16	15	41	150	1880	5	4.2	51	24	7	3.6	7	1.9
17	13	32	452	12100	8	5.9	61	44	6	2.7	7	1.8
18	4	8.5	78	920	3	2.1	55	23	7	2.6	5	1.3
19	9	20	71	650	9	11	43	13	8	2.7	148	504
20	62	291	46	288	7	7.2	27	6.6	8	2.5	46	86
21	75	529	30	167	6	4.6	31	9.8	6	1.7	17	18
22	15	67	22	95	43	52	33	14	6	1.3	8	6.4
23	9	31	27	93	9	6.9	43	15	5	1.1	9	5.8
24	8	24	58	257	5	2.9	33	9.4	6	1.3	6	3.2
25	12	32	25	116	4	2.0	26	6.5	5	1.1	5	2.3
26	15	35	16	51	4	1.8	29	7.3	5	1.1	4	1.6
27	16	34	20	53	4	1.7	20	4.5	6	1.2	2	.68
28	13	24	19	43	5	2.5	33	9.0	7	1.4	1	.31
29	14	23	22	43	5	2.5	39	11	8	2.0	2	.57
30	10	15	23	37	8	3.1	59	23	8	1.9	2	.52
31	---	---	19	28	---	---	30	13	10	3.1	---	---
TOTAL	---	31727.5	---	108022.6	---	681.8	---	1682.96	---	12236.0	---	689.28

01521000 ARKPORT RESERVOIR NEAR ARKPORT, NY

LOCATION.--Lat 42°23'45", long 77°43'00", Steuben County, Hydrologic Unit 02050104, on right bank 1,000 ft (305 m) upstream from Arkport Dam on Canisteo River, 1.3 mi (2.1 km) west of Arkport, and 2.3 mi (3.7 km) upstream from small tributary.

DRAINAGE AREA.--30.5 mi² (79.0 km²).

PERIOD OF RECORD.--January 1951 to current year.

REVISED RECORDS.--WSP 1552: 1951-57. WRD NY 1974: 1973.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Reservoir is formed by earthfill dam with concrete spillway, completed by Corps of Engineers in 1940 for flood control; first used for flood regulation on Mar. 31, 1940. Usable capacity, 7,936 acre-ft (9.79 hm³) between elevations 1,218.0 ft (371.25 m), sill of conduit, and 1,304.0 ft (397.46 m), crest of spillway. No dead storage. The flood-control works consist of a pressure conduit and a side-channel spillway and are not provided with gates. Water is stored during high flows and released gradually.

COOPERATION.--Capacity table furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 1,304.04 ft (397.471 m) June 23, 1972, contents, 7,944 acre-ft (9.79 hm³); minimum, 1,226.28 ft (373.77 m) many days in August and September 1978, contents, 0.3 acre-ft (370 m³), result of reservoir cleaning operations.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 1,254.10 ft (382.250 m) Apr. 5, contents, 1,348 acre-ft (1.66 hm³); minimum 1,226.28 ft (373.77 m) many days in August and September, contents, 0.3 acre-ft (370 m³), result of reservoir cleaning operations.

Capacity table (elevation, in feet, and usable contents, in acre-feet)
(Based on field survey by Corps of Engineers in 1937)

1,226.00	0	1,235.00	264	1,270.00	2,908
1,227.00	1	1,240.00	462	1,280.00	4,142
1,228.00	8	1,245.00	719	1,290.00	5,552
1,229.00	51	1,250.00	1,040	1,300.00	7,192
1,230.00	122	1,260.00	1,861	1,310.00	9,161

ELEVATION, IN FEET ABOVE NGVD, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1228.80	1228.24	1229.71	1228.53	1232.77	1228.71	1239.65	1228.97	1228.69	1227.88	1226.30	1226.29
2	1228.60	1228.23	1228.86	1228.52	1232.44	1228.62	1241.48	1228.96	1228.91	1227.88	1226.29	1226.29
3	1228.50	1228.23	1228.75	1228.50	1231.72	1228.62	1229.60	1228.94	1228.95	1227.88	1226.29	1226.28
4	1228.40	1228.34	1228.71	1228.50	1231.25	1228.66	1233.61	1228.93	1228.90	1227.88	1226.29	1226.28
5	1228.34	1228.37	1228.50	1228.50	1230.93	1228.60	1252.05	1231.20	1228.89	1227.88	1226.29	1226.29
6	1228.33	1228.34	1228.62	1228.50	1230.89	1229.02	1239.30	1230.57	1228.87	1227.87	1226.29	1226.29
7	1228.31	1229.16	1228.62	1228.50	1230.23	1228.64	1235.07	1229.11	1228.87	1227.87	1226.29	1226.29
8	1228.29	1229.39	1228.62	1229.23	1229.85	1228.58	1230.71	1229.05	1228.91	1227.87	1226.29	1226.28
9	1230.73	1228.85	1228.62	1235.46	1229.53	1228.59	1229.35	1231.22	1228.99	1227.87	1226.29	1226.28
10	1229.48	1230.06	1228.63	1233.42	1229.42	1228.58	1229.25	1232.38	1228.90	1227.87	1226.29	1226.28
11	1228.43	1229.14	1228.65	1233.02	1229.24	1228.70	1230.64	1229.15	1228.85	1227.85	1226.29	1226.30
12	1228.39	1228.87	1228.62	1232.27	1228.85	1228.70	1232.10	1229.08	1228.83	1227.69	1226.29	1226.29
13	1228.34	1228.82	1228.64	1231.80	1228.73	1228.68	1229.32	1229.46	1228.93	1227.77	1226.29	1226.29
14	1228.32	1228.75	1235.10	1231.11	1228.92	1231.86	1229.21	1243.22	1228.88	1227.77	1226.29	1226.29
15	1229.71	1228.79	1238.97	1231.01	1229.05	1237.23	1229.15	1242.88	1228.84	1227.76	1226.29	1226.29
16	1228.92	1228.88	1229.75	1230.34	1228.93	1232.93	1229.11	1230.65	1228.82	1227.77	1226.29	1226.29
17	1231.87	1229.58	1229.13	1230.09	1228.70	1230.98	1229.08	1238.83	1228.81	1227.35	1226.29	1226.29
18	1232.35	1229.19	1231.83	1229.85	1228.86	1229.94	1229.04	1232.52	1228.82	1227.23	1226.29	1226.29
19	1231.53	1228.93	1230.42	1229.59	1228.81	1229.58	1229.15	1231.27	1229.08	1227.78	1226.29	1226.29
20	1229.27	1228.82	1229.22	1229.36	1228.82	1229.61	1233.93	1229.47	1228.95	1227.77	1226.29	1226.30
21	1228.41	1228.81	1229.14	1229.91	1228.67	1236.90	1236.85	1231.34	1228.89	1227.78	1226.28	1226.30
22	1228.37	1228.75	1229.06	1229.55	1228.66	1249.39	1232.30	1229.37	1228.96	1227.83	1226.29	1226.29
23	1228.34	1228.68	1228.96	1229.49	1228.63	1242.45	1230.24	1229.14	1228.84	1227.81	1226.29	1226.29
24	1228.32	1228.66	1228.91	1229.42	1228.60	1234.59	1229.23	1229.13	1228.79	1227.79	1226.29	1226.29
25	1228.30	1228.62	1230.06	1229.48	1228.59	1229.33	1229.15	1229.08	1228.77	1227.77	1226.29	1226.29
26	1228.29	1228.62	1229.13	1234.48	1228.63	1229.44	1229.10	1229.03	1228.76	1227.55	1226.29	1226.29
27	1228.29	1228.55	1229.54	1237.34	1228.62	1231.35	1229.06	1228.99	1228.76	1226.79	1226.29	1226.29
28	1228.28	1228.55	1229.25	1235.46	1228.88	1231.36	1229.03	1228.96	1228.43	1226.40	1226.29	1226.28
29	1228.26	1228.54	1228.81	1234.20	---	1231.96	1229.01	1228.94	1227.89	1226.33	1226.29	1226.28
30	1228.25	1228.60	1228.59	1233.78	---	1230.07	1228.99	1228.92	1227.89	1226.32	1226.29	1226.29
31	1228.24	---	1228.56	1233.29	---	1231.27	---	1228.91	---	1226.31	1226.29	---
MEAN	1228.91	1228.78	1229.61	1231.06	1229.54	1231.39	1232.13	1230.89	1228.80	1227.55	1226.29	1226.29
MAX	1232.35	1230.06	1238.97	1237.34	1232.77	1249.39	1252.05	1243.22	1229.08	1227.88	1226.30	1226.30
MIN	1228.24	1228.23	1228.50	1228.50	1228.59	1228.58	1228.99	1228.91	1227.89	1226.31	1226.28	1226.28
+	18.3	45.4	31.6	214.0	67.3	258.7	50.1	46.7	7.2	0.3	0.3	0.3
‡	-0.8	+0.5	-0.2	+3.0	-2.6	+3.1	-3.5	-0.1	-0.7	-0.1	0	0

CAL YR 1977 MEAN 1229.92 MAX 1254.90 MIN 1227.70 ‡ 0
WTR YR 1978 MEAN 1229.27 MAX 1252.05 MIN 1226.28 ‡ -0.1

+ CONTENTS, IN ACRE-FEET, AT END OF MONTH.
‡ CHANGE IN CONTENTS, EQUIVALENT IN CUBIC FEET PER SECOND.

01521500 CANISTEO RIVER AT ARKPORT, NY

LOCATION.--Lat 42°23'45", long 77°42'42", Steuben County, Hydrologic Unit 02050104, on left bank 0.2 mi (0.3 km) downstream from Arkport Dam, and 0.9 mi (1.4 km) west of Arkport.

DRAINAGE AREA.--30.6 mi^2 (79.3 km^2).

PERIOD OF RECORD.--January 1937 to current year.

REVISED RECORDS.--WSP 1552: 1952-57. WSP 2103: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,202.85 ft (366.629 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except those for winter periods, which are poor. Since November 1939, flows above 500 ft^3/s (14.2 m^3/s) controlled by detention in Arkport Reservoir (see station 01521000).

AVERAGE DISCHARGE.--41 years, 35.7 ft^3/s (1.01 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,000 ft^3/s (56.6 m^3/s) Mar. 5, 1938, Feb. 20, 1939; maximum gage height, 5.63 ft (1.716 m) Feb. 19, 1939 (ice jam); practically no flow July 30, 1938, Sept. 30, 1939 (result of construction operations).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 8, 1935, reached a discharge of 4,820 ft^3/s (137 m^3/s), on basis of slope-area measurement.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,450 ft^3/s (41.1 m^3/s) Mar. 15, gage height, 4.00 ft (1.219 m); maximum gage height, 5.61 ft (1.710 m) Jan. 26 (ice jam); minimum discharge, 1.5 ft^3/s (0.04 m^3/s) Aug. 22, gage height, 0.68 ft (0.207 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	13	169	25	70	15	315	18	8.5	5.2	4.9	2.9
2	50	12	55	22	60	14	435	18	9.9	4.9	4.3	2.5
3	62	12	38	21	50	14	85	16	14	5.2	4.3	2.3
4	43	23	33	19	42	14	147	15	9.9	6.6	5.5	2.5
5	27	27	25	17	37	14	564	53	9.2	6.0	4.9	2.1
6	24	23	38	16	34	14	385	58	7.8	4.9	4.9	1.9
7	21	179	31	17	31	14	228	33	7.8	4.6	5.2	1.9
8	19	176	28	52	29	15	115	26	11	4.3	5.5	2.3
9	129	74	26	254	27	15	61	57	16	4.6	5.2	2.7
10	92	184	25	60	25	15	52	78	11	4.9	9.2	2.5
11	42	115	24	40	24	15	77	38	7.8	5.2	5.5	2.5
12	33	62	26	40	22	16	105	29	6.6	4.9	4.3	2.7
13	25	55	32	40	21	20	60	38	12	4.6	3.7	3.2
14	21	46	357	38	21	149	46	265	9.9	4.6	3.2	3.2
15	62	52	501	35	20	749	36	400	7.2	4.6	2.9	2.7
16	47	75	110	33	19	113	33	89	6.0	4.6	2.7	2.9
17	107	182	77	32	18	62	30	228	5.5	6.6	2.3	4.6
18	117	113	238	30	16	52	26	116	5.5	5.2	2.1	8.5
19	87	79	145	29	17	54	31	81	32	4.6	2.1	7.8
20	51	61	84	29	17	60	112	45	18	4.0	2.5	4.9
21	36	61	74	31	16	216	201	67	13	3.7	2.3	4.0
22	29	50	62	30	16	576	112	40	17	4.9	2.1	3.4
23	25	39	50	30	15	512	78	29	9.2	5.2	1.7	2.9
24	21	35	44	35	15	291	48	25	7.2	4.9	1.9	2.7
25	20	31	100	50	15	84	37	22	6.0	4.6	2.5	2.7
26	19	26	70	500	15	74	31	18	6.0	5.2	2.3	2.5
27	18	22	58	582	15	121	27	15	6.6	7.8	2.1	2.3
28	17	20	50	250	15	124	25	13	7.6	6.6	2.3	2.3
29	16	22	44	150	---	145	22	11	6.0	6.0	3.4	2.3
30	14	30	40	100	---	94	20	11	5.2	5.5	3.4	2.3
31	14	---	32	82	---	117	---	9.2	---	5.5	3.2	---
TOTAL	1328	1899	2686	2689	724	3768	3544	1961.2	299.6	160.0	112.4	94.0
MEAN	42.8	63.3	86.6	86.7	25.9	122	118	63.3	9.99	5.16	3.63	3.13
MAX	129	184	501	582	70	749	564	400	32	7.8	9.2	8.5
MIN	14	12	24	16	15	14	20	9.2	5.2	3.7	1.7	1.9

CAL YR 1977 TOTAL 20303.1 MEAN 55.6 MAX 712 MIN 2.8
WTR YR 1978 TOTAL 19285.2 MEAN 52.8 MAX 749 MIN 1.7

01523000 ALMOND LAKE NEAR ALMOND, NY

LOCATION.--Lat 42°20'50", long 77°42'20", Steuben County, Hydrologic Unit 02050104, at Almond Dam on Canacadea Creek, 2 mi (3 km) northeast of Almond, and 3 mi (5 km) upstream from mouth.

DRAINAGE AREA.--55.8 mi² (145 km²).

PERIOD OF RECORD.--July 1949 to September 1952 (monthly elevations and contents), October 1952 to current year. Prior to October 1970, published as "Almond Reservoir near Almond."

REVISED RECORDS.--WSP 2103: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Lake is formed by earthfill dam with concrete spillway, completed by Corps of Engineers in June 1949 for flood control; first used for flood regulation on Mar. 28, 1950. Usable capacity, 14,800 acre-ft (18.2 hm³) between elevations 1,229.0 ft or 374.60 m (sill of gates) and 1,300.0 ft or 396.24 m (crest of spillway). No dead storage. Figures given herein represent usable contents. Discharge is controlled by the operation of three gates. Water is stored during high flows and released when downstream conditions warrant. Lake is used for flood control and recreation.

COOPERATION.--Capacity table furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 1,298.58 ft (395.807 m) June 23, 1972, contents, 14,100 acre-ft (17.4 hm³); no contents for many days each year 1949-65.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 1,264.08 ft (385.292 m) May 15, contents, 2,466 acre-ft (3.04 hm³); minimum, 1,248.93 ft (380.674 m) Oct. 15, contents, 484 acre-ft (596,800 m³).

Capacity table (elevation, in feet, and usable contents, in acre-feet)
(Based on field survey by Corps of Engineers in 1938)

1,240.00	80	1,260.00	1,750
1,245.00	230	1,270.00	3,750
1,250.00	570	1,280.00	6,570
1,255.00	1,080	1,290.00	10,300

ELEVATION, IN FEET ABOVE NGVD, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1250.74	1251.04	1250.27	1250.60	1250.35	1250.54	1255.04	1250.11	1255.20	1255.43	1255.46	1255.36
2	1250.83	1250.62	1250.02	1250.38	1250.27	1250.57	1255.98	1250.66	1255.16	1255.43	1255.42	1255.39
3	1250.78	1250.48	1250.29	1250.50	1250.65	1250.58	1249.76	1251.21	1255.33	1255.44	1255.38	1255.40
4	1250.82	1250.41	1250.42	1250.69	1250.69	1250.67	1251.08	1251.82	1255.35	1255.49	1255.37	1255.45
5	1250.27	1249.92	1249.88	1250.84	1250.45	1250.60	1257.84	1252.92	1255.30	1255.55	1255.34	1255.48
6	1250.42	1250.14	1250.21	1250.50	1250.83	1250.51	1252.02	1253.38	1255.24	1255.56	1255.33	1255.49
7	1250.56	1250.71	1251.14	1250.11	1250.77	1250.47	1251.55	1253.86	1255.15	1255.56	1255.36	1255.50
8	1250.43	1250.86	1251.46	1250.64	1250.69	1250.42	1252.87	1254.27	1255.15	1255.56	1255.43	1255.55
9	1250.34	1250.25	1251.36	1251.72	1250.54	1250.33	1251.78	1254.81	1255.32	1255.55	1255.46	1255.63
10	1250.62	1251.25	1250.67	1250.50	1250.22	1250.49	1250.09	1255.74	1255.43	1255.55	1255.54	1255.58
11	1250.40	1250.69	1250.59	1251.57	1250.21	1250.76	1250.30	1255.63	1255.38	1255.53	1255.57	1255.53
12	1250.96	1249.96	1250.40	1251.56	1250.60	1250.60	1251.80	1255.20	1255.27	1255.50	1255.45	1255.51
13	1250.51	1249.90	1250.45	1251.36	1250.49	1249.85	1250.67	1255.27	1255.46	1255.46	1255.19	1255.48
14	1249.93	1250.75	1252.99	1250.97	1250.31	1250.39	1250.13	1258.33	1255.54	1255.43	1255.11	1255.42
15	1250.26	1250.33	1257.50	1250.48	1250.06	1252.60	1249.99	1263.40	1255.48	1255.41	1255.10	1255.34
16	1250.20	1250.91	1251.39	1250.32	1250.36	1250.79	1250.33	1260.62	1255.40	1255.41	1255.07	1255.29
17	1250.61	1251.73	1249.99	1250.30	1250.69	1250.59	1250.50	1258.92	1255.32	1255.58	1255.03	1255.30
18	1251.22	1250.95	1250.46	1250.68	1250.83	1250.51	1250.50	1255.48	1255.23	1255.60	1255.00	1255.42
19	1251.34	1251.73	1250.20	1251.12	1250.91	1250.15	1250.57	1254.97	1255.37	1255.59	1254.96	1255.56
20	1249.91	1251.33	1250.15	1251.23	1250.79	1250.92	1251.45	1254.90	1255.79	1255.56	1254.96	1255.37
21	1249.77	1250.42	1250.21	1250.59	1250.22	1253.84	1251.07	1255.39	1255.88	1255.52	1254.94	1255.18
22	1250.00	1250.16	1249.96	1250.12	1249.59	1262.85	1252.41	1255.20	1255.67	1255.52	1254.90	1255.13
23	1250.03	1250.59	1250.02	1250.43	1249.81	1261.62	1252.06	1255.38	1255.14	1255.51	1254.90	1255.14
24	1249.85	1250.89	1250.57	1250.75	1250.05	1258.94	1250.39	1255.43	1255.01	1255.48	1254.92	1255.14
25	1249.85	1251.02	1252.06	1250.89	1250.24	1252.34	1250.21	1255.43	1254.96	1255.44	1254.98	1255.14
26	1249.77	1251.05	1252.45	1252.27	1250.37	1250.21	1250.56	1255.28	1255.05	1255.39	1255.02	1255.13
27	1249.77	1250.86	1251.13	1252.18	1250.44	1251.63	1250.66	1255.12	1255.17	1255.38	1255.05	1255.11
28	1250.29	1250.59	1250.61	1250.64	1250.40	1250.77	1250.66	1255.19	1255.27	1255.44	1255.09	1255.09
29	1250.65	1250.26	1250.79	1250.50	---	1251.55	1250.49	1255.24	1255.36	1255.45	1255.17	1255.07
30	1250.91	1249.98	1250.75	1250.68	---	1250.37	1250.24	1255.27	1255.43	1255.46	1255.23	1255.05
31	1251.08	---	1250.75	1250.81	---	1251.93	---	1255.25	---	1255.47	1255.29	---
MEAN	1250.42	1250.66	1250.94	1250.84	1250.42	1251.88	1251.43	1255.15	1255.33	1255.49	1255.19	1255.34
MAX	1251.34	1251.73	1257.50	1252.27	1250.91	1262.85	1257.84	1263.40	1255.88	1255.60	1255.57	1255.63
MIN	1249.77	1249.90	1249.88	1250.11	1249.59	1249.85	1249.76	1250.11	1254.96	1255.38	1254.90	1255.05
+	672	602	637	630	613	810	576	1,105	1,133	1,136	1,120	1,084
‡	+0.1	-1.2	+0.6	-0.1	-0.3	+3.2	-3.9	+8.6	+0.5	0	-0.3	-0.6

CAL YR 1977 MEAN 1252.78 MAX 1265.94 MIN 1248.87 ‡ 0
WTR YR 1978 MEAN 1252.77 MAX 1263.40 MIN 1249.59 ‡ +0.6

+ CONTENTS, IN ACRE-FEET, AT END OF MONTH.
‡ CHANGE IN CONTENTS, EQUIVALENT IN CUBIC FEET PER SECOND.

01523500 CANACADEA CREEK NEAR HORNELL, NY

LOCATION.--Lat 42°20'05", long 77°41'00", Steuben County, Hydrologic Unit 02050104, on right bank 35 ft (11 m) downstream from bridge on State Highway 21, 1.2 mi (1.9 km) west of Hornell, 1.5 mi (2.4 km) downstream from Almond Dam, and 2 mi (3 km) upstream from mouth.

DRAINAGE AREA.--57.9 mi² (150 km²).

PERIOD OF RECORD.--October 1940 to December 1942, October 1944 to current year.

REVISED RECORDS.--WSP 2103: Drainage area. WRD NY 1971: 1969(M).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,185.68 ft (361.395 m) National Geodetic Vertical Datum of 1929. Oct. 23, 1940 to Dec. 31, 1942, at site 185 ft (56 m) upstream at different datum.

REMARKS.--Records good except those for winter periods, which are fair. Since October 1948, floodflows regulated by detention in Almond Lake (see station 01523000). Occasional regulation at low flows to clear debris from gates at Almond Lake. Monthly figures for 1952-66 water years adjusted for regulation.

AVERAGE DISCHARGE.--36 years (1940-42, 1944-78), 64.9 ft³/s (1.838 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,430 ft³/s (267 m³/s) May 17, 1945, gage height, 5.14 ft (1.567 m), from rating curve extended above 3,400 ft³/s (96.3 m³/s); maximum gage height, 6.65 ft (2.027 m) June 3, 1947; minimum discharge, 0.5 ft³/s (0.014 m³/s) May 29, 1965, gage height, 0.61 ft (0.186 m); minimum daily, 0.6 ft³/s (0.017 m³/s) May 30 to June 1, 1965.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 8, 1935, reached a stage of 16.61 ft (5.063 m), discharge, 21,000 ft³/s (595 m³/s), from floodmarks on basis of slope-area measurement of peak flow.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,260 ft³/s (35.7 m³/s) Mar. 23, gage height, 3.24 ft (0.988 m); minimum, 9.6 ft³/s (0.27 m³/s) part of each day Aug. 22 to Sept. 9, gage height, 0.90 ft (0.274 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	86	40	329	47	72	31	606	33	31	15	15	9.6
2	81	41	100	39	54	31	673	22	31	15	15	9.6
3	80	30	68	32	52	32	262	16	31	15	15	9.6
4	79	92	68	32	50	31	281	12	31	15	15	9.6
5	55	59	63	37	45	32	692	59	31	15	15	9.6
6	44	45	36	50	45	33	431	76	30	15	15	9.6
7	44	328	50	38	50	32	361	37	30	15	15	9.6
8	44	306	58	122	52	31	192	34	30	15	15	9.8
9	173	130	80	480	52	31	185	36	30	15	15	13
10	109	269	66	74	56	31	138	61	29	15	15	15
11	58	295	64	68	42	33	91	72	29	15	15	15
12	57	134	62	90	45	52	177	65	30	15	51	15
13	66	73	60	93	45	47	147	53	30	15	23	15
14	44	88	559	88	42	241	83	488	29	15	15	15
15	141	86	743	64	39	585	63	173	29	15	13	15
16	74	96	402	56	37	205	56	554	29	15	13	15
17	162	385	158	41	33	136	56	607	29	15	13	15
18	178	189	361	40	34	112	56	320	26	15	13	17
19	163	141	264	41	34	101	56	133	30	15	13	29
20	108	139	166	75	42	121	320	74	29	15	13	32
21	65	126	144	96	50	438	251	123	41	15	13	22
22	56	75	130	66	41	701	165	74	61	15	11	13
23	56	63	78	43	36	735	177	55	38	15	9.6	13
24	48	62	84	46	34	735	128	55	25	15	9.8	13
25	45	61	108	87	33	407	61	54	17	15	9.6	13
26	46	60	109	332	33	139	55	54	13	15	9.6	13
27	32	59	90	391	32	247	54	39	13	15	9.6	13
28	26	59	45	149	32	268	53	31	13	15	9.7	13
29	27	59	41	105	---	311	52	31	13	15	9.8	13
30	27	76	46	74	---	203	51	31	14	15	9.6	13
31	29	---	48	78	---	228	---	31	---	15	9.6	---
TOTAL	2303	3666	4680	3074	1212	6360	5974	3505	844	465	442.9	427.0
MEAN	74.3	122	151	99.2	43.3	205	199	113	28.1	15.0	14.3	14.2
MAX	178	385	743	480	72	735	692	607	61	15	51	32
MIN	26	30	36	32	32	31	51	12	13	15	9.6	9.6

CAL YR 1977 TOTAL 34488.3 MEAN 94.5 MAX 804 MIN 9.1
WTR YR 1978 TOTAL 32952.9 MEAN 90.3 MAX 743 MIN 9.6

01524500 CANISTEO RIVER BELOW CANACADEA CREEK, AT HORNELL, NY

LOCATION.--Lat 42°18'50", long 77°39'05", Steuben County, Hydrologic Unit 02050104, on right bank 235 ft (72 m) upstream from Erie Railroad bridge in Hornell, 0.3 mi (0.5 km) upstream from Crosby Creek, and 1.5 mi (2.4 km) downstream from Canacadea Creek.

DRAINAGE AREA.--158 mi^2 (409 km^2).

PERIOD OF RECORD.--August 1942 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,131.32 ft (344.826 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are poor. Diversion from Carrington Creek, a tributary upstream from station, by city of Hornell for municipal supply (1978 average, 3.9 ft^3/s or 0.11 m^3/s); sewage enters river downstream from gage. Since Nov. 1939, flood flows regulated by Arkport Reservoir (see station 01521000), and, since October 1948, by Almond Lake (see station 01523000); normal regulation occasionally sufficient to materially affect figures of monthly runoff.

COOPERATION.--Records of diversion from Carrington Creek furnished by city of Hornell.

AVERAGE DISCHARGE.--36 years, 159 ft^3/s (4.503 m^3/s), 13.67 in/yr (347 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,560 ft^3/s (271 m^3/s) June 23, 1972, gage height, 13.45 ft (4.100 m), from floodmark, from rating curve extended above 7,600 ft^3/s (215 m^3/s) on basis of critical-depth measurement of peak flow; minimum, 7.4 ft^3/s (0.21 m^3/s) Sept. 13, 14, 1955.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,910 ft^3/s (82.4 m^3/s) May 14, gage height, 7.64 ft (2.329 m); minimum, 17 ft^3/s (0.48 m^3/s) Aug. 20, gage height, 0.44 ft (0.134 m), result of regulation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	225	98	692	120	180	70	1450	113	84	43	39	30
2	255	100	259	120	150	68	1500	99	87	43	37	29
3	263	88	190	100	140	68	598	89	106	45	37	28
4	238	182	177	100	130	66	703	82	87	49	40	28
5	178	149	145	111	120	66	1810	165	84	46	36	28
6	152	126	130	122	110	66	1150	219	80	43	40	28
7	143	426	130	110	110	64	989	135	77	42	40	28
8	138	600	140	200	110	64	576	117	95	41	39	31
9	361	370	170	863	110	64	393	156	116	60	40	31
10	321	442	150	216	110	64	321	221	88	46	71	33
11	194	390	130	150	100	68	290	173	76	43	48	33
12	174	322	130	170	100	88	418	151	72	40	106	36
13	168	242	140	160	100	100	312	161	100	39	53	34
14	138	223	1120	150	100	470	227	990	83	39	43	31
15	241	224	1650	140	94	1300	191	818	71	42	37	31
16	186	256	737	130	96	553	173	825	63	46	36	35
17	373	351	406	110	88	342	165	1200	63	43	34	38
18	416	340	848	100	90	283	155	660	65	39	34	48
19	372	335	692	100	88	273	162	370	96	37	30	55
20	273	289	468	110	84	295	541	235	88	36	31	53
21	207	269	370	120	98	1160	694	306	94	37	35	43
22	176	218	343	110	88	1970	422	213	112	43	27	33
23	161	184	261	98	80	1770	362	169	84	40	28	32
24	121	177	242	100	78	1460	269	158	58	38	29	31
25	133	166	386	110	76	717	188	146	49	36	32	31
26	129	164	240	737	76	402	167	134	45	36	29	31
27	115	140	210	1150	72	609	156	114	46	45	26	30
28	103	142	150	418	70	634	146	99	55	44	31	30
29	96	128	130	280	---	702	138	94	46	40	36	29
30	94	146	143	220	---	506	132	90	44	44	31	29
31	91	---	141	210	---	568	---	87	---	40	31	---
TOTAL	6235	7287	11120	6935	2848	14930	14798	8589	2314	1305	1206	1007
MEAN	201	243	359	224	102	482	493	277	77.1	42.1	38.9	33.6
MAX	416	600	1650	1150	180	1970	1810	1200	116	60	106	55
MIN	91	88	130	98	70	64	132	82	44	36	26	28

CAL YR 1977 TOTAL 79182 MEAN 217 MAX 2170 MIN 34
WTR YR 1978 TOTAL 78574 MEAN 215 MAX 1970 MIN 26

01526500 TIOGA RIVER NEAR ERWINS, NY

LOCATION.--Lat 42°07'15", long 77°07'45", Steuben County, Hydrologic Unit 02050104, on right bank 20 ft (6 m) downstream from bridge on Mulholland Road, 1.1 mi (1.8 km) northeast of Erwins, and 1.1 mi (1.8 km) downstream from Canisteo River.

DRAINAGE AREA.--1,377 mi² (3,566 km²).

PERIOD OF RECORD.--July 1918 to current year.

REVISED RECORDS.--WSP 891: 1935-38. WSP 1672: 1919(M), 1927(M), 1929(M). WSP 2103: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 931.24 ft (283.842 m) National Geodetic Vertical Datum of 1929. Prior to June 21, 1931, nonrecording gage on highway bridge at same datum.

REMARKS.--Records good except those for winter periods, which are fair. High flows slightly regulated by upstream reservoirs.

AVERAGE DISCHARGE.--60 years, 1,382 ft³/s (39.14 m³/s), 13.63 in/yr (346 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 190,000 ft³/s (5,380 m³/s) June 23, 1972, from rating curve extended above 44,000 ft³/s (1,250 m³/s) on basis of slope-area measurements at gage heights 18.82 ft (5.736 m) and 23.54 ft (7.175 m) and on computation of peak flow at Lindley and Canisteo River at Erwins, 7.2 mi (11.6 km) and 2.0 mi (3.2 km) upstream, respectively, adjusted for flow from intervening area, gage height, 26.74 ft (8.150 m), from floodmarks; minimum, 18 ft³/s (0.51 m³/s) Sept. 2, 3, 1939; minimum gage height, 0.40 ft (0.122 m) Sept. 8, 9, 1954, July 23, Aug. 10, 11, 1955.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 17,000 ft³/s (481 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Nov. 7	2300	20,900	592	11.41	3.478
Nov. 11	0600	19,200	544	10.93	3.331
Dec. 15	0100	21,400	606	11.55	3.520
Jan. 9	1100	27,100	767	13.02	3.968
Jan. 26	--	19,400	549	ice jam	
Mar. 22	0500	*33,600	952	*14.55	4.435
Mar. 23	2400	23,300	660	12.06	3.676
Apr. 2	0200	20,200	572	11.20	3.414
May 14	2200	31,600	895	14.11	4.301
May 17	0900	18,100	513	10.60	3.231

Minimum discharge, 141 ft³/s (3.99 m³/s) Aug. 28, Sept. 8, gage height, 0.91 ft (0.277 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1520	758	5520	1100	1900	580	10400	898	680	236	264	360
2	2800	723	3940	1000	1600	580	13400	815	623	221	240	292
3	1830	700	2550	920	1400	560	7060	742	919	225	210	223
4	1690	2810	2260	850	1300	560	5330	673	849	268	629	201
5	1280	11100	1700	820	1200	560	10300	856	667	315	421	185
6	1070	4760	1600	860	1100	540	7000	1710	593	281	1960	167
7	1020	8370	1500	940	1000	540	7550	1230	546	240	2670	153
8	876	15800	1300	1100	1000	540	6660	983	911	217	2000	148
9	1230	8100	1200	18000	980	520	4670	1020	1130	225	967	192
10	2440	5670	1100	5800	940	520	3730	1370	951	268	654	191
11	1400	13600	1100	2900	920	560	3220	1230	667	214	540	199
12	1080	6280	1200	2300	900	640	3900	977	563	198	705	226
13	984	4400	2400	2000	880	740	3190	1210	660	179	746	243
14	871	3270	6800	1600	860	1400	2490	10900	673	206	457	238
15	1010	2830	18100	1500	840	12000	2020	16700	529	523	352	191
16	2360	2490	8880	1400	820	8600	1730	7350	452	307	301	177
17	7770	3380	5770	1300	820	5000	1550	13100	405	395	271	172
18	6470	4300	6150	1200	800	3740	1360	7290	395	315	241	182
19	5910	2770	7640	1100	780	3620	1360	5430	534	236	219	663
20	6190	2250	5090	1100	760	5120	2970	3650	575	198	209	742
21	4560	1980	4600	1000	740	10100	5670	3280	457	187	191	470
22	3370	1830	4170	1000	700	25300	3620	2730	575	272	165	375
23	2600	1570	3270	940	680	17900	2620	2030	495	233	161	321
24	2050	1500	2710	1000	680	14600	2200	2100	390	214	157	274
25	1710	1390	5050	2700	660	7770	1820	2460	329	187	155	246
26	1480	1350	3510	10000	640	5730	1540	1660	302	183	155	221
27	1330	1210	2000	13000	620	9330	1370	1350	281	176	148	203
28	1190	1080	1700	7400	600	9630	1210	1140	298	198	144	188
29	1040	1030	1400	4600	---	9270	1080	983	307	225	156	177
30	929	1020	1300	3200	---	7180	988	857	268	229	169	166
31	839	---	1200	2500	---	6580	---	739	---	277	194	---
TOTAL	70899	118321	116710	95140	26120	170310	122008	97463	17024	7648	15851	7786
MEAN	2287	3944	3765	3069	933	5494	4067	3144	567	247	511	260
MAX	7770	15800	18100	18000	1900	25300	13400	16700	1130	523	2670	742
MIN	839	700	1100	820	600	520	988	673	268	176	144	148
CFSM	1.66	2.86	2.73	2.23	.68	3.99	2.95	2.28	.41	.18	.37	.19
IN.	1.92	3.20	3.15	2.57	.71	4.60	3.30	2.63	.46	.21	.43	.21

CAL YR 1977 TOTAL 686086 MEAN 1880 MAX 18100 MIN 133 CFSM 1.37 IN 18.53
WTR YR 1978 TOTAL 865280 MEAN 2371 MAX 25300 MIN 144 CFSM 1.72 IN 23.38

01527000 COHOCTON RIVER AT COHOCTON, NY

LOCATION.--Lat 42°30'00", long 77°30'02", Steuben County, Hydrologic Unit 02050105, on left bank 450 ft (137 m) downstream from bridge on U.S. Highway 15 at Cohocton, 800 ft (244 m) downstream from small tributary, and 1.4 mi (2.3 km) upstream from Reynolds Creek.

DRAINAGE AREA.--52.2 mi² (135 km²).

PERIOD OF RECORD.--October 1950 to current year.

REVISED RECORDS.--WSP 2103: Drainage area. WRD NY 1972: 1970, 1971.

GAGE.--Water-stage recorder. Datum of gage is 1,275.49 ft (388.769 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair.

AVERAGE DISCHARGE.--28 years, 57.5 ft³/s (1.63 m³/s), 14.96 in/yr (380 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,260 ft³/s (64.0 m³/s) June 23, 1972, gage height, 9.82 ft (2.993 m); minimum, 0.1 ft³/s (0.003 m³/s) Oct. 6, 1954, gage height, 1.30 ft (0.396 m), result of regulation from unknown cause.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 300 ft³/s (8.50 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Mar. 23	1800	395	11.2	4.94	1.506	Apr. 6	0300	*548	15.5	*5.62	1.713

Minimum discharge, 9.0 ft³/s (0.25 m³/s) Sept. 11, 15, 16, 29; minimum gage height, 1.49 ft (0.454 m) Sept. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	240	53	93	82	110	30	294	66	32	18	17	10
2	270	48	100	72	100	28	411	62	31	17	15	9.8
3	250	45	94	52	90	26	436	57	32	17	15	11
4	220	54	84	56	80	26	413	53	29	20	18	15
5	200	56	60	60	72	25	528	56	27	19	15	12
6	160	54	62	58	66	26	540	63	26	17	15	11
7	130	70	70	56	62	24	501	62	25	16	16	9.8
8	110	105	76	70	62	23	450	55	34	15	15	10
9	130	125	72	110	62	22	372	56	35	16	15	12
10	170	145	66	110	58	26	302	55	28	15	26	10
11	160	174	66	140	58	28	255	51	24	15	19	9.5
12	120	198	64	130	56	28	234	47	22	14	16	10
13	110	188	64	110	54	30	215	49	37	13	14	12
14	102	168	92	98	52	52	199	55	35	13	13	10
15	99	147	186	90	45	130	176	58	24	13	13	9.5
16	103	133	229	84	38	130	153	58	21	13	12	11
17	127	141	231	76	44	120	134	80	21	17	12	15
18	160	156	220	70	41	106	118	87	22	14	12	14
19	181	169	220	68	36	93	106	85	28	13	12	29
20	177	164	220	68	37	85	112	76	32	13	13	19
21	167	152	210	64	36	146	125	79	25	20	12	14
22	155	139	190	62	35	267	129	74	29	38	11	13
23	139	127	170	60	34	353	120	67	22	22	11	12
24	123	116	140	56	36	365	111	62	20	16	11	11
25	109	107	130	56	37	329	103	57	19	15	11	10
26	98	101	120	110	36	285	97	51	18	14	11	9.8
27	89	91	110	130	29	245	90	46	19	16	11	9.5
28	80	83	110	150	26	230	83	42	30	40	10	9.5
29	72	77	94	150	---	220	76	39	22	32	11	9.5
30	65	74	90	140	---	209	71	36	20	22	10	9.2
31	58	---	88	120	---	204	---	33	---	18	10	---
TOTAL	4374	3460	3821	2758	1492	3911	6954	1819	789	561	422	357.1
MEAN	141	115	123	89.0	53.3	126	232	58.7	26.3	18.1	13.6	11.9
MAX	270	198	231	150	110	365	540	87	37	40	26	29
MIN	58	45	60	52	26	22	71	33	18	13	10	9.2
CFSM	2.70	2.20	2.36	1.71	1.02	2.41	4.44	1.13	.50	.35	.26	.23
IN.	3.12	2.47	2.72	1.97	1.06	2.79	4.95	1.30	.56	.40	.30	.25

CAL YR 1977 TOTAL 31038.0 MEAN 85.0 MAX 450 MIN 10 CFSM 1.63 IN 22.12
WTR YR 1978 TOTAL 30718.1 MEAN 84.2 MAX 540 MIN 9.2 CFSM 1.61 IN 21.89

01528000 FIVEMILE CREEK NEAR KANONA, NY

LOCATION.--Lat 42°23'18", long 77°21'29", Steuben County, Hydrologic Unit 02050105, on left bank just downstream from town of Wheeler highway bridge, 1.3 mi (2.1 km) upstream from mouth and Kanona.

DRAINAGE AREA.--66.8 mi² (173 km²).

PERIOD OF RECORD.--February 1937 to current year.

REVISED RECORDS.--WSP 2103: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,170.30 ft (356.707 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to Oct. 1, 1973, at datum 1.00 ft (0.305 m) higher.

REMARKS.--Records good except those for winter periods, which are poor.

AVERAGE DISCHARGE.--41 years, 75.8 ft³/s (2.147 m³/s), 15.41 in/yr (391 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,110 ft³/s (145 m³/s) June 23, 1972, gage height, 6.95 ft (2.118 m) present datum; maximum gage height, 7.10 ft (2.164 m) present datum, Mar. 31, 1940 (ice jam); minimum discharge, 0.04 ft³/s (0.001 m³/s) Sept. 27, 29, 1941; minimum gage height, 0.72 ft (0.219 m) present datum, Sept. 4, 1973 (result of channel improvement).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 880 ft³/s (24.9 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 26	--	a960	27.2	ice jam	
Jan. 27	1900	ice jam		*6.06	1.847
Mar. 15	--	a960	27.2	ice jam	
Mar. 23	2400	1,090	30.9	4.50	1.372
April 1	2100	*1,230	34.8	4.68	1.426
April 5	1200	1,120	31.7	4.54	1.384
Aug. 12	0530	1,120	31.7	4.54	1.384

a About.

Minimum discharge, 4.0 ft³/s (0.11 m³/s) Sept. 11, gage height, 0.93 ft (0.283 m).

DISCHARGE. IN CUBIC FEET PER SECOND. WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	162	43	339	60	96	43	883	39	23	8.9	7.7	11
2	280	41	217	58	92	43	1140	38	30	8.0	6.9	7.8
3	190	43	116	54	86	42	575	35	37	8.4	7.4	7.4
4	168	92	95	52	80	41	383	33	24	16	7.5	7.8
5	112	92	72	50	76	40	1080	47	19	15	6.1	8.6
6	90	82	78	47	72	38	687	70	16	12	6.8	6.9
7	81	275	70	48	66	37	656	56	16	13	6.5	6.8
8	73	731	66	54	62	37	506	47	33	10	8.1	6.1
9	170	486	64	410	60	37	219	66	51	10	12	9.0
10	226	291	60	260	58	37	165	82	31	9.9	20	5.9
11	112	679	56	130	58	50	170	60	20	8.5	15	5.2
12	96	333	58	120	56	68	195	51	15	7.3	881	6.7
13	80	173	66	110	56	80	136	70	22	6.8	328	5.7
14	70	147	280	100	56	170	108	75	25	8.6	75	5.9
15	83	132	719	100	54	720	94	75	16	19	43	5.5
16	114	169	480	100	52	500	83	73	13	15	32	5.8
17	506	335	250	100	50	310	76	317	11	16	25	5.9
18	484	358	254	100	49	220	71	163	11	15	20	8.9
19	266	209	357	98	48	160	66	98	22	11	15	22
20	145	138	229	84	47	140	141	76	26	8.3	14	18
21	109	114	187	84	45	290	201	78	22	18	13	12
22	93	102	160	84	44	876	126	66	29	52	12	10
23	80	92	120	84	44	932	88	56	19	21	11	9.0
24	74	87	110	82	44	944	73	51	14	14	15	7.5
25	68	80	170	80	44	545	65	46	12	10	11	6.8
26	63	81	120	350	44	290	58	40	11	9.5	9.4	6.4
27	58	72	100	230	44	356	53	36	10	8.5	8.1	6.7
28	56	67	90	180	43	395	49	34	9.6	8.5	8.3	5.6
29	52	65	82	140	---	483	45	31	11	9.4	11	4.9
30	49	68	70	110	---	356	42	30	10	9.6	12	4.8
31	46	---	64	98	---	434	---	30	---	8.4	13	---
TOTAL	4256	5677	5199	3657	1626	8714	8234	2069	608.6	395.6	1660.8	240.6
MEAN	137	189	168	118	58.1	281	274	66.7	20.3	12.8	53.6	8.02
MAX	506	731	719	410	96	944	1140	317	51	52	881	22
MIN	46	41	56	47	43	37	42	30	9.6	6.8	6.1	4.8
CFSM	2.05	2.83	2.52	1.77	.87	4.21	4.10	1.00	.30	.19	.80	.12
IN.	2.37	3.16	2.90	2.04	.91	4.85	4.59	1.15	.34	.22	.92	.13

CAL YR 1977 TOTAL 43261.5 MEAN 119 MAX 1490 MIN 6.6 CFSM 1.78 IN 24.09
WTR YR 1978 TOTAL 42337.6 MEAN 116 MAX 1140 MIN 4.8 CFSM 1.74 IN 23.58

01528700 DIVERSION FROM WANETA LAKE TO KEUKA LAKE AT KEUKA, NY

LOCATION.--Lat 42°29'06", long 77°06'39", Steuben County, Hydrologic Unit 02050105, at entrance to conduit on Diversion Canal, 0.8 mi (1.3 km) east of Keuka, and 1.0 mi (1.6 km) north of Wayne.

DRAINAGE AREA.--45.5 mi² (118 km²).

PERIOD OF RECORD.--October 1966 to current year.

GAGE.--Daily power generation records.

REMARKS.--Records for January 1951 to September 1966 on file. Sketch indicates diversion from Lamoka-Waneta Lakes (Susquehanna River Basin) to Keuka Lake (Oswego River Basin).

COOPERATION.--Records furnished by New York State Electric and Gas Corp.

AVERAGE DISCHARGE.--12 years, 25.3 ft³/s (0.716 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 73 ft³/s (2.07 m³/s) June 23, 1972; no flow for many days each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 68 ft³/s (1.93 m³/s) Nov. 20, Dec. 24 to Jan. 2; no flow many days.

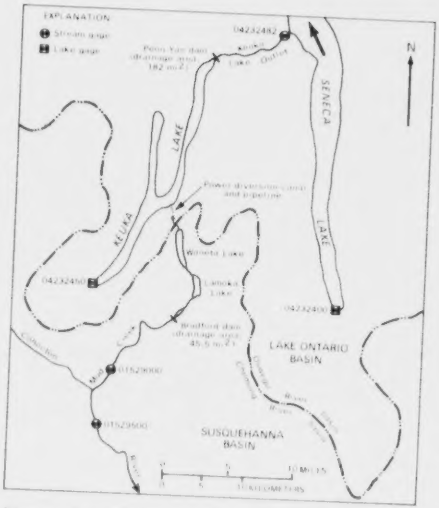

EXPLANATION
Stream gage
Lake gage
04232482
Penn Yan dam (drainage area 182 mi²)
Keuka Lake Outlet
N
SENECA LAKE
KEUKA LAKE
Power diversion canal and pipeline
Waneta Lake
Lamoka Lake
04232450
04232400
Bradford dam (drainage area 45.5 mi²)
LAKE ONTARIO BASIN
Cohocton
Mud Creek
01529000
01529500
SUSQUEHANNA BASIN
River
0 5 10 MILES
0 5 10 KILOMETERS

Figure 8.--Gaging stations and transbasin diversion, Cohocton River-Keuka Lake area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEH	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	66	55	.00	68	66	39	66	30	.00	.00	.00	.00
2	66	55	.00	68	66	39	66	.00	.00	.00	.00	.00
3	66	55	.00	66	66	39	66	.00	.00	.00	.00	.00
4	66	55	.00	66	66	39	66	.00	.00	.00	.00	.00
5	66	55	.00	66	66	39	66	.00	.00	.00	.00	.00
6	66	55	.00	66	66	39	66	.00	.00	.00	.00	.00
7	66	55	.00	66	66	39	66	.00	15	.00	.00	.00
8	60	55	.00	66	66	39	66	.00	33	.00	.00	.00
9	60	60	.00	66	66	39	66	.00	60	.00	.00	.00
10	60	66	.00	66	66	37	66	.00	55	.00	.00	.00
11	30	66	.00	66	66	37	66	.00	55	.00	.00	.00
12	36	66	.00	66	66	37	66	.00	39	.00	60	.00
13	66	66	.00	66	66	34	66	.00	.00	.00	63	.00
14	66	66	.00	66	66	34	66	.00	.00	.00	60	.00
15	5.2	66	.00	66	63	43	66	32	.00	.00	24	.00
16	.00	66	.00	66	63	43	66	55	.00	.00	.00	.00
17	30	66	.00	66	58	55	66	55	.00	.00	.00	.00
18	60	66	.00	66	58	55	66	60	.00	.00	.00	.00
19	60	66	.00	66	58	55	66	66	.00	.00	.00	.00
20	60	68	.00	66	55	66	66	66	.00	.00	.00	.00
21	60	66	.00	66	55	66	66	66	.00	.00	.00	.00
22	60	66	3.0	66	49	66	66	66	.00	.00	.00	.00
23	48	66	35	66	49	66	66	66	22	.00	.00	.00
24	.00	66	68	66	49	66	66	66	55	.00	.00	.00
25	21	66	68	66	49	66	66	66	55	.00	.00	.00
26	48	53	68	66	49	66	66	42	25	.00	.00	.00
27	55	.00	68	66	48	66	66	.00	.00	.00	.00	.00
28	48	.00	68	66	48	66	66	.00	.00	.00	.00	.00
29	48	.00	68	66	---	66	66	.00	.00	.00	.00	.00
30	42	.00	68	66	---	66	66	.00	.00	.00	.00	.00
31	48	---	68	66	---	66	---	.00	---	.00	.00	---
TOTAL	1533.20	1611.00	582.00	2050	1675	1573	1980	736.00	414.00	.00	207.00	.00
MEAN	49.5	53.7	18.8	66.1	59.8	50.7	66.0	23.7	13.8	.000	6.68	.000
MAX	66	68	68	68	66	66	66	66	60	.00	63	.00
MIN	.00	.00	.00	66	48	34	66	.00	.00	.00	.00	.00

CAL YR 1977 TOTAL 6134.20 MEAN 22.3 MAX 69 MIN .00
WTR YR 1978 TOTAL 12361.20 MEAN 33.9 MAX 68 MIN .00

01529000 MUD CREEK NEAR SAVONA, NY

LOCATION.--Lat 42°18'30", long 77°11'50", Steuben County, Hydrologic Unit 02050105, on left bank just upstream from small tributary entering from east, 2.4 mi (3.9 km) upstream from Savona, and 3.3 mi (5.3 km) upstream from mouth.

DRAINAGE AREA.--76.6 mi² (198 km²).

PERIOD OF RECORD.--July 1918 to December 1919 (published as "at Savona"), March 1937 to current year.

REVISED RECORDS.--WSP 2103: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,049.63 ft (319.927 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to December 1919, nonrecording gage at site 1.5 mi (2.4 km) downstream at different datum.

REMARKS.--Records good except those for winter periods, which are fair. Flow regulated by Lake Lamoka-Waneta System. Diversion table for station 01528700 represents discharge from 45.5 mi² (118 km²) of drainage area from the Susquehanna River basin to the St. Lawrence River basin through the Keuka power diversion canal of New York State Electric and Gas Corp. Monthly records of diversion for January 1951 to September 1966 available in files of the Geological Survey.

COOPERATION.--Records of diversion furnished by New York State Electric and Gas Corp.

AVERAGE DISCHARGE.--41 years (1937-78), 41.7 ft³/s (1.18 m³/s) unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,100 ft³/s (173 m³/s) June 23, 1972, gage height, 8.66 ft (2.640 m), from rating curve extended above 1,350 ft³/s (38.2 m³/s) on basis of slope-area measurement of peak flow; minimum, 0.04 ft³/s (0.001 m³/s) Sept. 21-23, 1941, gage height, 0.53 ft (0.162 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 685 ft³/s (19.4 m³/s) Mar. 24, gage height, 4.51 ft (1.375 m); minimum, 2.0 ft³/s (0.057 m³/s) Sept. 28, gage height, 0.66 ft (0.201 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	15	96	24	50	23	420	23	13	4.9	4.1	4.0
2	57	15	159	22	42	23	498	23	13	4.8	3.6	3.4
3	40	14	172	21	38	23	338	22	18	5.2	3.8	3.3
4	30	39	168	20	35	23	307	20	14	18	5.0	3.1
5	24	39	150	19	33	23	417	31	12	12	4.0	3.0
6	21	30	140	18	33	23	346	43	11	7.5	5.7	2.9
7	19	50	120	17	32	22	371	33	11	6.0	8.9	2.7
8	16	146	110	21	32	22	337	27	15	5.6	7.3	2.9
9	32	109	100	330	31	22	274	30	38	6.9	5.8	3.2
10	44	82	96	130	31	22	242	32	25	6.3	12	2.8
11	26	304	96	52	30	21	88	27	15	5.5	9.3	2.7
12	20	180	96	45	28	22	74	23	12	4.9	16	2.8
13	17	294	110	39	27	24	58	43	21	4.7	22	2.8
14	16	356	170	35	26	52	49	45	18	6.0	10	2.7
15	21	148	390	33	25	170	44	47	12	8.3	6.2	2.5
16	51	60	317	30	25	200	41	45	10	6.1	4.8	2.8
17	297	72	242	28	24	120	38	160	9.6	5.7	4.0	3.2
18	256	134	229	26	24	80	35	90	9.2	5.3	3.6	3.6
19	110	60	282	25	24	74	37	58	10	4.9	3.3	3.7
20	95	45	249	25	24	90	69	46	10	4.5	3.5	3.4
21	176	39	314	25	24	186	107	53	10	4.6	3.3	3.4
22	161	36	355	25	24	582	67	41	13	13	3.0	4.5
23	131	32	349	25	24	614	50	33	9.2	11	2.9	4.8
24	119	31	233	25	24	623	43	30	8.0	7.4	3.3	5.4
25	45	29	178	33	24	578	38	28	7.4	5.5	3.8	5.7
26	28	33	150	274	23	578	34	23	7.0	4.8	3.5	3.9
27	25	28	82	366	23	583	32	21	7.0	4.9	3.3	2.5
28	23	25	38	248	23	456	29	19	6.5	4.9	3.2	2.5
29	21	24	30	150	---	385	27	17	6.0	4.7	4.2	2.5
30	18	27	27	100	---	329	25	15	5.4	5.2	3.9	2.5
31	16	---	25	60	---	328	---	14	---	4.7	3.9	---
TOTAL	1992	2496	5273	2291	803	6321	4535	1162	376.3	203.8	181.2	99.2
MEAN	64.3	83.2	170	73.9	28.7	204	151	37.5	12.5	6.57	5.85	3.31
MAX	297	356	390	366	50	623	498	160	38	18	22	5.7
MIN	16	14	25	17	23	21	25	14	5.4	4.5	2.9	2.5

CAL YR 1977 TOTAL 18785.4 MEAN 51.5 MAX 517 MIN 1.1
WTR YR 1978 TOTAL 25733.5 MEAN 70.5 MAX 623 MIN 2.5

01529500 COHOCTON RIVER NEAR CAMPBELL, NY

LOCATION.--Lat 42°15'10", long 77°13'00", Steuben County, Hydrologic Unit 02050105, on left bank just downstream from bridge on town road at junction with County Highway 125, 1.9 mi (3.1 km) upstream from Michigan Creek, and 2 mi (3 km) north of Campbell.

DRAINAGE AREA.--470 mi² (1,217 km²).

PERIOD OF RECORD.--July 1918 to current year.

REVISED RECORDS.--WSP 891: 1935. WSP 1302: 1919-20(M), 1927-28(M), 1928-38 (monthly runoff). WSP 2103: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,016.34 ft (309.780 m) National Geodetic Vertical Datum of 1929. Prior to Mar. 5, 1937, nonrecording gage on highway bridge.

REMARKS.--Records good except those for winter periods, which are fair. During each year since 1927, a large part of flow from 45.5 mi² (118 km²) of drainage area upstream from Lake Lamoka on Mud Creek, a tributary upstream from this station, is diverted into Keuka Lake (Oswego River basin), for power development. For table of diversion, see station 01528700.

AVERAGE DISCHARGE.--60 years, 450 ft³/s (12.74 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 41,100 ft³/s (1,160 m³/s) July 8, 1935, gage height, 11.6 ft (3.54 m), from floodmark, from rating curve extended above 24,200 ft³/s (685 m³/s) on basis of velocity-area and slope-area measurements of peak flow; minimum, 8 ft³/s (0.23 m³/s) Sept. 6, 7, 1934.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,200 ft³/s (119 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Mar. 23	2230	5,590	158	5.73	1.747	Apr. 5	0800	5,100	144	5.44	1.658
Apr. 1	2400	*5,950	169	*5.94	1.811						

Minimum discharge, 36 ft³/s (1.02 m³/s) Sept. 30, gage height, 0.19 ft (0.058 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	912	329	1330	520	640	240	3800	406	221	122	97	80
2	1180	312	1110	480	520	240	4820	389	225	116	88	69
3	936	301	930	460	450	230	2810	360	310	117	85	61
4	872	530	857	440	420	230	2340	336	252	172	108	114
5	713	562	730	410	400	230	4660	427	225	165	95	91
6	629	488	680	390	370	220	3230	574	211	131	101	70
7	555	1190	620	380	360	220	3320	454	201	119	133	59
8	516	2800	580	500	350	220	2860	396	256	111	119	59
9	765	1910	540	2400	350	220	2020	430	444	199	106	78
10	985	1530	500	1300	340	210	1650	507	315	134	212	69
11	678	2950	490	900	330	210	1400	417	236	116	164	58
12	602	1860	500	800	320	240	1440	377	206	104	1610	54
13	536	1470	580	700	320	280	1180	484	251	95	776	61
14	473	1360	1400	620	310	600	1020	1090	263	119	307	55
15	510	1160	3130	560	310	2000	884	1180	203	269	197	50
16	656	983	2250	520	300	1700	796	770	178	144	156	49
17	1820	1330	1720	470	300	1300	714	1900	169	178	133	63
18	1760	1470	1700	450	290	1000	641	1220	167	136	112	99
19	1380	1190	2000	420	290	860	628	883	199	115	101	141
20	1130	989	1790	400	280	900	992	705	246	99	100	141
21	1010	890	1640	380	270	2000	1400	727	199	93	94	100
22	926	814	1540	360	270	4850	1030	587	254	255	85	80
23	798	734	1360	340	260	4520	830	490	192	177	77	72
24	714	686	1180	340	260	4340	731	444	165	128	76	66
25	598	630	1200	400	260	2850	654	401	155	104	88	58
26	519	617	1000	1300	250	2320	598	344	148	96	84	50
27	476	541	860	2200	250	2400	549	310	146	104	72	48
28	441	500	740	1400	250	2350	507	284	146	119	68	47
29	407	472	660	1000	---	2450	466	264	147	140	84	41
30	378	471	620	880	---	2000	434	248	135	132	87	39
31	351	---	580	760	---	2150	---	236	---	109	85	---
TOTAL	24226	31069	34817	22460	9320	43580	48404	17640	6465	4218	5700	2122
MEAN	781	1036	1123	725	333	1406	1613	569	216	136	184	70.7
MAX	1820	2950	3130	2400	640	4850	4820	1900	444	269	1610	141
MIN	351	301	490	340	250	210	434	236	135	93	68	39

CAL YR 1977 TOTAL 237155 MEAN 650 MAX 5710 MIN 47
WTR YR 1978 TOTAL 250041 MEAN 685 MAX 4850 MIN 39

01529950 CHEMUNG RIVER AT CORNING, NY

LOCATION.--Lat 42°08'47", long 77°03'28", Steuben County, Hydrologic Unit 02050105, on right bank adjacent to Corning Glass Works power plant, 0.2 mi (0.3 km) upstream from bridge on State Highway 414 (Centerway) at Corning, and 1.7 mi (2.7 km) downstream from Cohocton River.

DRAINAGE AREA.--2,006 mi² (5,196 km²).

PERIOD OF RECORD.--Occasional discharge measurements water years 1941, 1968-69. October 1974 to current year.

GAGE.--Water-stage recorder. Datum of gage is 900.00 ft (274.320 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except those for winter periods, which are poor. High flows slightly regulated by upstream reservoirs. During each year a large part of flow from 45.5 mi² (118 km²) of drainage area is diverted from Mud Creek, an upstream tributary, into Keuka Lake (Oswego River basin) for power development. For table of diversion, see station 01528700.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 127,000 ft³/s (3,600 m³/s) Sept. 26, 1975, gage height, 32.46 ft (9.894 m); minimum 210 ft³/s (5.95 m³/s) Aug. 29, 1978; minimum gage height, 14.60 ft (4.450 m) Sept. 12, 13, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 23, 1972, reached a stage of 40.71 ft (12.408 m), from floodmark (discharge, 228,000 ft³/s or 6,460 m³/s), from peak flows determined at upstream and downstream stations adjusted for drainage area and channel storage.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 24,000 ft³/s (680 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Nov. 7	2400	24,000	680	22.04	6.718	Jan. 26	1800	ice jam		*26.53	8.086
Nov. 11	0600	24,800	702	22.17	6.757	Mar. 22	0600	*41,700	1,180	24.48	7.462
Dec. 15	0600	25,900	733	22.34	6.809	Mar. 24	0100	30,600	867	23.05	7.026
Jan. 9	1100	31,000	878	23.10	7.041	Apr. 2	0100	28,100	796	22.68	6.913

Minimum discharge, 210 ft³/s (5.95 m³/s) Aug. 29; minimum gage height, 14.67 ft (4.471 m) Sept. 7, 8.

REVISIONS.--The minimum discharge for water year 1976 has been revised to 223 ft³/s (6.32 m³/s) Sept. 14, 15, 16, 1976, gage height 14.68 ft (4.474 m) and the minimum discharge for water year 1977 has been revised to 205 ft³/s (5.81 m³/s) Oct. 7; revised daily discharges for the period August and September 1976, are given below. These figures supersede those published in the reports for 1976 and 1977.

DISCHARGE, IN CUBIC FEET PER SECOND, AUGUST AND SEPTEMBER 1976

MEAN VALUES

AUGUST

DAY	FT^3/s	DAY	FT^3/s	DAY	FT^3/s
1	982	11	1200	21	419
2	1120	12	950	22	391
3	760	13	812	23	363
4	606	14	812	24	335
5	508	15	788	25	314
6	455	16	963	26	307
7	899	17	820	27	356
8	4990	18	650	28	363
9	2520	19	547	29	314
10	1590	20	472	30	294
				31	287
[illegible]					26187
MEAN					845
MAX					4990
MIN					287

SEPTEMBER

DAY	FT^3/s	DAY	FT^3/s	DAY	FT^3/s
1	294	11	287	21	321
2	307	12	294	22	321
3	314	13	280	23	307
4	300	14	248	24	280
5	287	15	229	25	268
6	274	16	254	26	274
7	268	17	280	27	321
8	254	18	342	28	448
9	248	19	464	29	448
10	274	20	363	30	356
TOTAL					9205
MEAN					307
MAX					464
MIN					229

	TOTAL	MEAN	MAX	MIN
WTR YR 1976	971498	2654	38400	229
CAL YR 1976	908520	2482	38400	229

01529950 CHEMUNG RIVER AT CORNING, NY--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2660	1220	6760	1800	2800	900	15400	1450	1000	410	498	424
2	4180	1090	5210	1600	2300	900	20200	1340	961	381	475	453
3	2970	1060	3470	1500	2000	860	10700	1250	1250	388	424	347
4	2750	2710	3070	1400	1900	860	8040	1160	1210	467	851	334
5	2170	11700	2600	1400	1800	860	16100	1390	996	530	700	334
6	1850	5180	2400	1400	1600	840	11100	2430	894	460	1910	286
7	1820	9280	2200	1400	1500	820	11800	1880	841	438	2990	243
8	1770	20000	2000	1700	1500	820	10400	1550	1130	424	2360	243
9	2400	10700	1800	21600	1400	800	7170	1610	1580	460	1300	291
10	4200	7400	1700	7850	1400	800	5700	2100	1390	514	1010	315
11	2790	17900	1700	4300	1400	840	4920	1800	1010	460	873	309
12	2290	8750	2300	3400	1300	1000	5620	1500	851	431	2010	341
13	1980	6100	3300	2900	1300	2200	4610	1900	927	403	1740	361
14	1490	4790	11000	2500	1300	4920	3730	13000	1030	410	939	367
15	1610	4110	22900	2300	1200	14500	3120	18000	820	927	652	291
16	3120	3600	12100	2100	1200	10700	2710	8600	730	615	538	255
17	10900	4420	7940	1900	1200	6700	2430	15000	661	690	475	255
18	9140	5870	8110	1800	1200	5000	2170	9200	643	615	410	309
19	7940	4020	10700	1700	1200	4610	2140	6800	740	490	374	810
20	7810	3280	7170	1600	1100	6130	3840	4700	873	431	347	1040
21	5930	2890	6370	1500	1100	11500	7590	4300	750	410	347	690
22	4560	2640	5840	1500	1100	32400	4870	3600	830	589	334	546
23	3660	2330	4660	1400	1000	23900	3660	2700	770	555	309	475
24	3010	2150	3930	1500	1000	20800	3140	2700	634	475	291	410
25	2600	2020	6220	3600	1000	11600	2660	3000	555	424	291	367
26	2270	1930	4790	12000	960	8510	2330	2200	514	403	291	334
27	2060	1770	3300	15000	940	12200	2090	1800	482	403	286	303
28	1850	1550	2700	9000	920	12900	1900	1500	490	424	267	280
29	1640	1460	2300	5810	---	12700	1710	1400	506	475	231	261
30	1460	1410	2100	4300	---	9860	1580	1200	460	475	231	249
31	1370	---	2000	3500	---	9350	---	1100	---	522	243	---
TOTAL	106250	153330	162640	125260	38620	230780	183430	122160	25528	15099	23997	11523
MEAN	3427	5111	5246	4041	1379	7445	6114	3941	851	487	774	384
MAX	10900	20000	22900	21600	2800	32400	20200	18000	1580	927	2990	1040
MIN	1370	1060	1700	1400	920	800	1580	1100	460	381	231	243

CAL YR 1977 TOTAL 971322 MEAN 2661 MAX 22900 MIN 280
WTR YR 1978 TOTAL 1198617 MEAN 3284 MAX 32400 MIN 231

01530380 NEWTOWN CREEK AT BREESPORT, NY

LOCATION.--Lat 42°10'23", long 76°43'56", Chemung County, Hydrologic Unit 02050105, on right bank adjacent to State Highway 223 at Breesport, 300 ft (90 m) upstream from bridge on Church Street, and 600 ft (180 m) upstream from Jackson Creek.

DRAINAGE AREA.--20.6 mi² (53.4 km²).

PERIOD OF RECORD.--August 1975 to September 1978 (no winter records; discontinued).

GAGE.--Water-stage recorder. Datum of gage is 1,090.95 ft (332.522 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,200 ft³/s (62.3 m³/s) Sept. 26, 1975, gage height, 7.00 ft (2.134 m), on basis of slope-area measurement of peak flow; minimum daily discharge recorded, 0.80 ft³/s (0.02 m³/s), July 29 to Aug. 4, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge recorded, 1,660 ft³/s (47.0 m³/s) Nov. 4, gage height, 5.62 ft (1.713 m); minimum discharge, 0.96 ft³/s (0.03 m³/s) Sept. 9-18, gage height, 0.57 ft (0.174 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	70	7.1				7.6	155	5.1	3.8	2.5	1.6	1.3
2	67	6.8				7.4	112	5.1	3.6	2.3	1.4	1.2
3	71	6.1				7.2	48	4.8	3.8	2.5	4.0	1.2
4	57	372				7.0	91	4.5	3.8	4.5	5.5	1.2
5	35	224				6.8	120	21	3.6	5.1	3.0	1.1
6	35	95				6.6	70	49	3.3	3.6	20	1.1
7	27	245				6.6	132	32	3.6	3.0	17	1.1
8	20	292				6.6	73	23	11	2.8	20	1.1
9	53	100				6.6	47	55	20	2.5	12	1.1
10	42	105				6.6	41	40	9.5	2.1	11	.96
11	27	200				7.8	43	31	5.0	1.8	5.4	.96
12	24	90				10	50	25	3.8	2.1	3.3	.96
13	20	62				13	36	23	4.7	2.1	2.6	.96
14	16	54				40	29	54	4.1	2.2	2.2	.96
15	21	45				160	23	47	3.0	3.3	2.0	.96
16	77	47				80	19	46	2.6	2.1	1.6	.96
17	188	39				50	16	85	2.4	3.0	1.6	.96
18	131	38				33	13	48	2.2	1.6	1.8	1.1
19	175	31				42	13	40	2.4	1.6	1.8	1.5
20	129	27				56	39	33	2.4	1.6	1.6	1.3
21	60	23				244	65	34	2.6	2.1	1.6	1.3
22	43	20				262	37	26	4.4	2.1	1.5	1.3
23	31	18				247	27	21	3.0	1.9	1.5	1.2
24	23	16				120	25	19	2.6	1.9	1.6	1.2
25	20	15				64	19	18	2.1	1.9	1.6	1.1
26	18	14				55	17	13	1.8	1.9	1.5	1.1
27	15	13				296	15	11	3.0	1.8	1.3	1.1
28	13	12				121	12	8.1	4.2	1.8	1.3	1.1
29	11	11				81	9.6	6.6	3.3	1.6	1.2	1.1
30	8.6	12				60	8.1	6.3	2.8	1.8	1.1	1.1
31	7.5	---				65	---	5.3	---	1.6	1.3	---
TOTAL	1535.1	2240.0				2175.8	1404.7	839.8	128.4	72.7	134.9	33.58
MEAN	49.5	74.7				70.2	46.8	27.1	4.28	2.35	4.35	1.12
MAX	188	372				296	155	85	20	5.1	20	1.5
MIN	7.5	6.1				6.6	8.1	4.5	1.8	1.6	1.1	.96
CFSM	2.40	3.63				3.41	2.27	1.32	.21	.11	.21	.05
IN.	2.77	4.04				3.93	2.54	1.52	.23	.13	.24	.06

01530500 NEWTOWN CREEK AT ELMIRA, NY

LOCATION.--Lat 42°06'16" (revised), long 76°47'54", Chemung County, Hydrologic Unit 02050105, on left bank 200 ft (61 m) downstream from bridge on Linden Place in Elmira, and 1.5 mi (2.4 km) upstream from mouth.

DRAINAGE AREA.--77.5 mi² (201 km²).

PERIOD OF RECORD.--May 1938 to current year.

REVISED RECORDS.--WSP 1502: 1956. WSP 2103: Drainage area. WRD NY 1974: 1973.

GAGE.--Water-stage recorder. Datum of gage is 838.35 ft (255.529 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records poor. Diurnal fluctuation at low flow caused by operations of sand and gravel plant and wastewater treatment plant upstream.

AVERAGE DISCHARGE.--40 years, 88.7 ft³/s (2.512 m³/s), 15.54 in/yr (395 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 4,000 ft³/s (113 m³/s) June 23, 1972; maximum gage height, 19.28 ft (5.877 m) June 23, 1972, from floodmarks (backwater from Chemung River); minimum daily discharge, 5.0 ft³/s (0.14 m³/s) Aug. 22, Sept. 19, 1965.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,200 ft³/s (34.0 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 17	0945	1,840	52.1	12.12	3.694	Jan. 9	0815	*1,880	53.2	*12.26	3.737
Nov. 4	2400	1,840	52.1	12.12	3.694	Jan. 26	2100	1,250	35.4	10.17	3.100
Nov. 8	1230	1,430	40.5	10.77	3.283	Mar. 22	0230	1,780	50.4	11.92	3.633
Nov. 11	0515	1,310	37.1	10.36	3.158	Mar. 27	1945	1,860	52.7	12.18	3.712
Dec. 14	2245	1,430	40.5	10.75	3.277						

Minimum discharge, 6.0 ft³/s (0.17 m³/s) Sept. 28, minimum gage height, 4.95 ft (1.509 m) Aug. 3, Sept. 3, 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	190	57	530	78	130	42	550	56	38	24	19	13
2	292	55	246	72	110	42	518	54	36	22	18	9.5
3	266	54	176	66	98	41	274	51	39	24	23	8.3
4	225	550	152	64	88	40	276	48	35	50	40	9.1
5	136	897	123	64	84	39	566	86	33	36	23	10
6	111	338	134	64	86	38	304	167	32	29	46	10
7	95	460	116	64	82	38	477	137	35	26	58	11
8	78	1000	100	110	76	38	320	96	45	24	40	12
9	188	460	90	1180	72	38	220	169	68	24	31	13
10	154	329	84	330	68	42	178	157	51	23	30	10
11	98	852	74	180	66	50	170	115	38	23	22	11
12	82	358	74	120	64	60	192	95	35	22	20	13
13	74	262	90	100	62	76	151	87	42	22	20	14
14	66	216	600	92	62	222	130	170	36	21	17	13
15	81	190	903	84	60	671	115	179	31	29	16	14
16	285	198	437	76	58	351	103	153	31	27	13	14
17	1410	165	316	72	56	244	94	354	30	31	11	13
18	591	170	332	68	54	206	84	191	34	27	11	15
19	468	136	325	64	52	234	83	153	38	24	10	20
20	487	118	262	60	50	322	130	119	31	22	10	17
21	264	107	250	56	49	719	261	124	32	23	10	13
22	192	101	234	54	48	1240	160	99	36	29	10	11
23	148	91	198	50	47	863	119	82	30	28	10	10
24	121	88	170	50	45	605	105	77	27	26	11	8.7
25	105	82	323	70	45	318	92	73	26	23	11	8.3
26	95	89	200	753	45	274	84	61	24	22	12	7.5
27	85	80	140	756	44	1030	77	53	28	22	10	7.5
28	78	74	120	360	43	874	71	48	37	35	11	6.7
29	70	70	100	240	---	515	64	45	27	36	11	9.1
30	64	80	92	190	---	356	59	42	24	41	10	7.5
31	60	---	86	150	---	339	---	40	---	19	14	---
TOTAL	6659	7727	7077	5737	1844	9967	6027	3381	1049	834	598	339.2
MEAN	215	258	228	185	65.9	322	201	109	35.0	26.9	19.3	11.3
MAX	1410	1000	903	1180	130	1240	566	354	68	50	58	20
MIN	60	54	74	50	43	38	59	40	24	19	10	6.7
CFSM	2.77	3.33	2.94	2.39	.85	4.16	2.59	1.41	.45	.35	.25	.15
IN.	3.20	3.71	3.40	2.75	.89	4.78	2.89	1.62	.50	.40	.29	.16

CAL YR 1977 TOTAL 44927.0 MEAN 123 MAX 1410 MIN 14 CFSM 1.59 IN 21.56
WTR YR 1978 TOTAL 51239.2 MEAN 140 MAX 1410 MIN 6.7 CFSM 1.81 IN 24.59

01531000 CHEMUNG RIVER AT CHEMUNG, NY

LOCATION.--Lat 42°00'08", long 76°38'06", Chemung County, Hydrologic Unit 02050105, on right bank 100 ft (30 m) upstream from bridge on State Highway 427, 0.7 mi (1.1 km) southwest of Chemung, and 12.2 mi (19.6 km) upstream from mouth.

DRAINAGE AREA.--2,506 mi² (6,491 km²).

PERIOD OF RECORD.--September 1903 to current year (gage heights only for some winter periods).

REVISED RECORDS.--WSP 891: 1935-39. WSP 1432: 1904, 1907, 1915. WSP 2103: Drainage area. WRD NY 1974: 1973.

GAGE.--Water-stage recorder. Datum of gage is 778.63 ft (237.326 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to Jan. 10, 1930, nonrecording gage on highway bridge 60 ft (18 m) upstream at same datum.

REMARKS.--Records good except those for winter periods, which are fair. High flows slightly regulated by upstream reservoirs. During each year a large part of flow from 45.5 mi² (118 km²) of drainage area is diverted from Mud Creek, an upstream tributary, into Keuka Lake (Oswego River basin) for power development. For table of diversion, see station 01528700.

AVERAGE DISCHARGE.--72 years (1905-13, 1914-78), 2,544 ft³/s (72.05 m³/s), 13.79 in/yr (350 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 189,000 ft³/s (5,350 m³/s) June 23, 1972, gage height, 31.62 ft (9.638 m), from floodmark, from rating curve extended above 65,000 ft³/s (1,840 m³/s) on basis of slope-area and velocity-area studies at gage height 19.57 ft (5.965 m) and slope-area and contracted opening measurements at gage heights 23.97 (7.306 m) and 31.62 ft (9.638 m); minimum, 49 ft³/s (1.39 m³/s) Aug. 14, 1911, gage height, 1.47 ft (0.448 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 30,000 ft³/s (850 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Nov. 8	0900	31,400	889	13.32	4.060	Mar. 22	1500	*47,200	1,340	*16.25	4.953
Dec. 15	1400	33,400	946	13.75	4.191	Apr. 2	0900	32,500	920	13.57	4.136
Jan. 9	1900	35,800	1,010	14.23	4.337	May 15	1000	34,100	966	13.91	4.240

Minimum discharge, 281 ft³/s (7.96 m³/s) Sept. 8, 17, 18, gage height, 3.66 ft (1.116 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3370	1890	7980	2400	4100	1100	15400	1800	1500	463	419	396
2	5680	1740	8220	2200	3400	1100	27900	1600	1400	417	419	495
3	4470	1660	5080	2000	2800	1100	15800	1500	1510	409	422	440
4	3970	4220	4380	1800	2500	1100	10200	1400	1840	646	675	363
5	3230	18400	3840	1700	2400	1100	18700	1500	1620	693	899	332
6	2720	9230	3390	1700	2200	1100	15800	2820	1390	671	2650	335
7	2480	8390	3000	1700	1800	1000	14900	3250	1390	522	4790	305
8	2220	27900	2700	2100	2000	1000	14100	2670	1520	451	3770	285
9	2240	18000	2500	24000	1900	1000	9760	2500	2260	409	2240	300
10	4330	10600	2200	15800	1800	1000	7350	2820	2260	483	1470	290
11	3310	23700	2000	6550	1800	1000	6260	2760	1720	470	1200	311
12	2590	14100	2000	5000	1700	1100	6490	2390	1370	386	1270	313
13	2300	8910	2600	4100	1600	1400	6180	2240	1310	380	2960	323
14	2080	6690	7200	3500	1600	2440	4980	5740	1470	358	1590	327
15	2030	5650	30000	2800	1600	14900	4220	26800	1250	501	969	338
16	2960	4930	19200	2800	1500	16800	3860	11800	1020	768	736	321
17	16600	4950	11600	2600	1500	9910	3750	18700	905	555	602	290
18	14800	7550	9270	2300	1500	7100	3270	13700	828	665	516	286
19	12100	5390	14900	2200	1500	6230	2740	9120	994	494	445	319
20	11900	4360	10000	2100	1500	8510	3480	6320	1100	398	407	1050
21	9020	3860	8320	2000	1400	12200	9050	5180	1080	358	377	877
22	6520	3580	7910	1900	1400	40400	6780	4880	1020	428	363	630
23	5180	3230	6370	1900	1400	31900	4900	3660	1090	564	340	502
24	4220	3030	5360	1800	1300	31500	4220	3290	842	458	311	429
25	3640	2900	6810	2000	1300	25400	3730	3930	691	389	316	390
26	3210	2740	8050	7200	1300	22200	3230	3000	609	372	307	352
27	2880	2630	4380	23500	1200	21200	2960	2600	569	363	307	325
28	2650	2310	3560	14600	1200	21200	2650	2300	581	359	307	306
29	2420	2220	2960	9300	---	18300	2400	2000	547	357	307	297
30	2190	2190	2900	6200	---	14100	2100	1800	535	393	307	297
31	2010	---	2600	5000	---	12300	---	1600	---	402	339	---
TOTAL	149320	216950	211280	164750	51200	330690	237160	155670	36221	14582	32030	11824
MEAN	4817	7232	6815	5315	1829	10670	7905	5022	1207	470	1033	394
MAX	16600	27900	30000	24000	4100	40400	27900	26800	2260	768	4790	1050
MIN	2010	1660	2000	1700	1200	1000	2100	1400	535	357	307	285
CFSM	1.92	2.89	2.72	2.12	.73	4.26	3.15	2.00	.48	.19	.41	.16
IN.	2.22	3.22	3.14	2.45	.76	4.91	3.52	2.31	.54	.22	.48	.18

CAL YR 1977 TOTAL 1316144 MEAN 3606 MAX 30000 MIN 323 CFSM 1.44 IN 19.54
WTR YR 1978 TOTAL 1611677 MEAN 4416 MAX 40400 MIN 285 CFSM 1.76 IN 23.92

LAKES AND RESERVOIRS IN SUSQUEHANNA RIVER BASIN

01496450 CANADARAGO LAKE AT SCHUYLER LAKE, NY (see station for daily mean elevation).

01499500 EAST SIDNEY LAKE AT EAST SIDNEY, NY (see station for daily mean elevation, skeleton capacity table, monthly contents, and change in contents).

01511000 WHITNEY POINT LAKE AT WHITNEY POINT, NY (see station for daily mean elevation, skeleton capacity table, monthly contents, and change in contents).

01521000 ARKPORT RESERVOIR NEAR ARKPORT, NY (see station for daily mean elevation, skeleton capacity table, monthly contents, and change in contents).

01523000 ALMOND LAKE NEAR ALMOND, NY (see station for daily mean elevation, skeleton capacity table, monthly contents, and change in contents).

DIVERSION OF WATER AFFECTING THE SUSQUEHANNA RIVER BASIN

01528700 Diversion from Waneta Lake to Keuka Lake at Keuka, NY (see station for daily discharge).

03011020 ALLEGHENY RIVER AT SALAMANCA, NY

LOCATION.--Lat 42°09'23", long 78°42'56", Cattaraugus County, Hydrologic Unit 05010001, on left bank 230 ft (70 m) upstream from Main Street bridge in Salamanca, 1.3 mi (2.1 km) downstream from Great Valley Creek, and 1.6 mi (2.6 km) upstream from Little Valley Creek.

DRAINAGE AREA.--1,608 mi^2 (4,165 km^2).

PERIOD OF RECORD.--September 1903 to current year. Monthly discharge only for some periods, published in WSP 1305. Prior to October 1964, published as "at Red House."

REVISED RECORDS.--WSP 1385: 1907, 1909-12, 1913(M), 1914-15, 1916-17(M), 1925, 1927. WSP 1907: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,358.00 ft (413.918 m) National Geodetic Vertical Datum of 1929 (Corps of Engineers bench mark). Prior to Sept. 3, 1917, nonrecording gage and Sept. 4, 1917 to Sept. 30, 1964, water-stage recorder at site 7.5 mi (12.1 km) downstream at different datum. Oct. 1, 1964 to Sept. 30, 1967, at present site at datum 0.04 ft (0.012 m) lower.

REMARKS.--Records good except those for winter periods, which are poor.

AVERAGE DISCHARGE.--75 years, 2,790 ft^3/s (79.01 m^3/s), 23.56 in/yr (598 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 73,000 ft^3/s (2,070 m^3/s) June 23, 1972, gage height, 24.01 ft (7.318 m), from floodmarks; minimum daily, 79 ft^3/s (2.24 m^3/s) Sept. 10, 11, 1971.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 17,000 ft^3/s (481 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Dec. 15	--	21,000	595	ice jam	
Jan. 27	0400	ice jam		*14.53	4.429
Apr. 5	1000	*22,200	629	11.60	3.536

Minimum discharge, 242 ft^3/s (6.85 m^3/s) Sept. 7, 8, gage height, 2.90 ft (0.884 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5580	1340	6990	2100	3100	960	10300	1900	1510	601	440	281
2	5720	1260	8440	1900	2800	940	15900	1770	1410	544	362	362
3	4980	1210	6830	1800	2600	920	13500	1670	1430	511	323	342
4	4060	1180	5830	1700	2400	900	13000	1540	1290	500	355	292
5	3410	1180	4400	1700	2200	880	21500	1960	1160	500	511	270
6	3060	1170	3300	1800	2100	860	18600	2890	1080	480	490	264
7	2820	1440	3200	2060	2000	860	16200	2620	996	440	1480	247
8	2460	2820	2700	2560	1900	840	15100	2320	1080	411	1780	247
9	3410	2810	2300	9960	1800	840	12300	2780	1780	500	1600	264
10	5480	3460	2000	7960	1700	820	10200	4150	2030	459	1180	270
11	4340	6110	2000	5800	1600	800	9030	3820	1400	421	1090	329
12	3770	4990	2100	4500	1500	920	8460	3390	1080	368	876	355
13	3370	4310	2400	3800	1400	1500	7280	3920	1080	348	778	402
14	2990	3850	8000	3200	1300	2690	6110	7490	1240	430	637	335
15	2730	3580	20000	2600	1300	9200	5130	11100	1040	402	544	287
16	2610	4060	17900	2200	1300	10000	4350	10100	876	402	480	270
17	2620	5070	15300	1900	1200	7660	3770	10800	819	375	450	258
18	2860	7410	13200	1700	1200	5910	3280	10500	778	421	430	287
19	2830	6540	13000	1600	1100	4880	2950	8850	1280	368	384	1110
20	3240	5660	9960	1500	1100	4530	2910	7140	1780	329	375	2170
21	3240	5690	7990	1500	1100	6670	3700	6340	1410	323	362	1160
22	3090	6060	6620	1400	1100	15700	3700	5420	1490	450	348	805
23	2830	5110	5520	1400	1100	15700	3260	4380	1280	469	323	661
24	2530	4720	4880	1300	1000	16200	3060	3800	981	421	310	555
25	2300	4200	6340	2500	1000	13200	2910	3490	833	368	292	480
26	2110	3800	5600	7000	1000	10600	2740	2970	751	348	275	421
27	1960	3490	4000	7000	980	9360	2560	2560	712	411	264	384
28	1940	3140	3400	5200	980	8070	2380	2230	981	480	258	355
29	1780	2890	3000	4500	---	7740	2190	2010	950	375	275	335
30	1600	2840	2700	3800	---	7060	2030	1820	712	440	287	316
31	1460	---	2400	3400	---	7280	---	1670	---	480	292	---
TOTAL	97180	111390	202300	101340	43860	174590	228400	137400	35239	13375	17851	14114
MEAN	3135	3713	6526	3269	1566	5632	7613	4432	1175	431	576	470
MAX	5720	7410	20000	9960	3100	16200	21500	11100	2030	601	1780	2170
MIN	1460	1170	2000	1300	980	800	2030	1540	712	323	258	247
CFSM	1.95	2.31	4.06	2.03	.97	3.50	4.73	2.76	.73	.27	.36	.29
IN.	2.25	2.58	4.68	2.34	1.01	4.04	5.28	3.18	.82	.31	.41	.33

CAL YR 1977 TOTAL 1436619 MEAN 3936 MAX 20000 MIN 383 CFSM 2.45 IN 33.24
WTR YR 1978 TOTAL 1177039 MEAN 3225 MAX 21500 MIN 247 CFSM 2.01 IN 27.23

03013000 CONEWANGO CREEK AT WATERBORO, NY

LOCATION.--Lat 42°10'15", long 79°04'10", Chautauqua County, Hydrologic Unit 05010002, on right bank 300 ft (91 m) downstream from bridge on State Highway 394 at Waterboro, 0.2 mi (0.3 km) downstream from Davis Brook, 0.4 mi (0.6 km) upstream from Harris Brook, and 1.9 mi (3.1 km) northeast of Kennedy.

DRAINAGE AREA.--290 mi² (751 km²).

PERIOD OF RECORD.--September 1938 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,255.30 ft (382.615 m) National Geodetic Vertical Datum of 1929 (Corps of Engineers bench mark). Prior to Nov. 7, 1939, nonrecording gages at site 1,300 ft (396 m) upstream at various datums. Nov. 7, 1939 to Nov. 4, 1940, nonrecording gage at site 1,100 ft (335 m) upstream at datum 0.79 ft (0.241 m) higher, and Nov. 5, 1940 to May 28, 1948, nonrecording gage at site 700 ft (213 m) downstream at present datum.

REMARKS.--Records fair except those for period of no gage-height record, Oct. 1 to Nov. 27, which are poor.

AVERAGE DISCHARGE.--40 years, 521 ft³/s (14.75 m³/s), 24.40 in/yr (620 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,600 ft³/s (244 m³/s) Apr. 7, 1947; maximum gage height, 11.58 ft (3.530 m) Mar. 8, 1956; minimum discharge observed, 22 ft³/s (0.62 m³/s) Aug. 18, 1940, Sept. 27, 29, 1941.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,300 ft³/s (65.1 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Nov. 22	0100	2,460	69.7	7.91	2.411	Mar. 25	1100	3,040	86.1	8.83	2.691
Dec. 19	0800	*3,740	106	*9.67	2.947	Apr. 6	1000	3,340	94.6	9.20	2.804

Minimum discharge, 37 ft³/s (1.05 m³/s) Aug. 27, gage height, 2.55 ft (0.777 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2400	240	1480	450	634	210	1790	249	150	69	63	44
2	2200	230	1710	400	575	200	2130	241	141	67	67	42
3	2000	230	1680	360	530	200	2270	233	136	67	58	42
4	1800	250	1370	360	480	200	2410	223	127	67	54	43
5	1600	280	1040	360	460	200	3020	249	117	66	54	42
6	1400	370	849	370	430	200	3310	333	112	64	54	40
7	1100	660	660	380	400	200	3290	314	109	63	54	39
8	960	1010	520	660	370	200	3130	278	132	70	54	41
9	840	898	430	1000	350	200	2750	298	165	116	54	42
10	880	887	400	1030	340	210	2210	336	141	86	53	44
11	820	1160	420	1090	330	220	1760	304	125	68	54	55
12	760	1220	500	1110	320	240	1560	269	108	61	53	63
13	620	1220	580	1050	310	260	1350	272	105	58	50	90
14	520	1140	1450	992	300	525	1030	384	105	57	48	75
15	470	1130	2550	898	290	1370	759	403	99	58	46	64
16	420	1530	3060	777	290	1550	567	349	92	55	45	62
17	390	1920	3290	662	280	1500	430	567	89	54	47	66
18	370	2220	3550	560	260	1320	370	839	91	51	46	82
19	370	2370	3720	500	250	1120	342	759	108	50	46	111
20	390	2390	3520	450	240	1010	352	517	122	49	49	122
21	410	2410	3190	430	230	1370	458	508	109	52	49	99
22	420	2450	2780	410	230	2060	512	478	113	71	45	79
23	400	2330	2290	390	230	2440	504	377	108	65	43	68
24	370	2150	1810	380	220	2800	446	326	97	57	42	65
25	350	1830	1800	380	220	3010	392	295	91	52	42	59
26	330	1470	1700	651	220	2910	349	260	86	50	41	55
27	310	1150	1300	827	210	2410	317	231	82	73	40	55
28	290	970	940	827	210	2270	292	209	80	84	40	51
29	270	832	720	794	---	2020	275	193	76	74	45	49
30	260	772	600	772	---	1790	263	180	73	80	47	49
31	250	---	520	717	---	1640	---	163	---	70	46	---
TOTAL	23970	37719	50429	20067	9209	36055	38638	10637	3289	2024	1529	1838
MEAN	773	1257	1627	647	329	1163	1288	343	110	65.3	49.3	61.3
MAX	2400	2450	3720	1110	634	3010	3310	839	165	116	67	122
MIN	250	230	400	360	210	200	263	163	73	49	40	39
CFSM	2.67	4.33	5.61	2.23	1.13	4.01	4.44	1.18	.38	.23	.17	.21
IN.	3.07	4.84	6.47	2.57	1.18	4.62	4.96	1.36	.42	.26	.20	.24

CAL YR 1977 TOTAL 308385 MEAN 845 MAX 3720 MIN 78 CFSM 2.91 IN 39.56
WTR YR 1978 TOTAL 235404 MEAN 645 MAX 3720 MIN 39 CFSM 2.22 IN 30.20

03013946 CHAUTAUQUA LAKE AT BEMUS POINT, NY

LOCATION.--Lat 42°09'23", long 79°23'39", Chautauqua County, Hydrologic Unit 05010002, 6 ft (1.8 m) east of lake shore, 30 ft (9.1 m) south of the intersection of Pauline Avenue and Lakeside Avenue, and 950 ft (290 m) southeast of the ferry landing, at Bemus Point.

DRAINAGE AREA.--189 mi² (490 km²).

PERIOD OF RECORD.--October 1972 to September 1973; November 1974 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to Nov. 1974 at site 950 ft (290 m) northwest at same datum.

REMARKS.--Lake regulated for flood control by Warner Dam. Area of water surface, 20.98 mi² (54.34 km²).

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 1,311.23 ft (399.663 m) Mar. 5, 1976; minimum, 1,306.35 ft (398.175 m) Mar. 11, 12, 13, 14, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 1,309.33 ft (399.084 m) Oct. 3; minimum, 1,306.35 ft (398.175 m) Mar. 11, 12, 13, 14.

ELEVATION, IN FEET ABOVE NGVD, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1309.28	1307.53	1308.47	1308.43	1307.56	1306.57	1308.13	1308.02	1308.22	1308.08	1307.82	1307.59
2	1309.30	1307.53	1308.52	1308.36	1307.52	1306.54	1308.40	1308.02	1308.22	1308.06	1307.81	1307.57
3	1309.30	1307.54	1308.47	1308.29	1307.47	1306.53	1308.41	1308.01	1308.20	1308.03	1307.80	1307.59
4	1309.19	1307.57	1308.39	1308.21	1307.42	1306.52	1308.49	1308.02	1308.18	1308.01	1307.80	1307.61
5	1309.06	1307.65	1308.36	1308.13	1307.37	1306.50	1308.94	1308.05	1308.16	1308.00	1307.78	1307.59
6	1308.92	1307.68	1308.33	1308.05	1307.34	1306.48	1308.97	1308.09	1308.14	1307.98	1307.78	1307.58
7	1308.82	1307.76	1308.28	1307.98	1307.31	1306.45	1309.00	1308.10	1308.14	1307.97	1307.77	1307.57
8	1308.70	1307.90	1308.21	1308.04	1307.26	1306.43	1308.97	1308.11	1308.16	1307.98	1307.76	1307.57
9	1308.68	1307.93	1308.19	1308.40	1307.22	1306.40	1308.90	1308.16	1308.16	1308.00	1307.74	1307.57
10	1308.70	1308.03	1308.16	1308.43	1307.17	1306.38	1308.81	1308.21	1308.15	1307.99	1307.74	1307.55
11	1308.62	1308.19	1308.13	1308.42	1307.13	1306.36	1308.74	1308.23	1308.14	1307.96	1307.73	1307.54
12	1308.53	1308.23	1308.07	1308.38	1307.09	1306.36	1308.70	1308.24	1308.13	1307.94	1307.71	1307.60
13	1308.44	1308.21	1308.03	1308.33	1307.05	1306.36	1308.61	1308.27	1308.14	1307.92	1307.70	1307.61
14	1308.34	1308.17	1308.34	1308.26	1307.01	1306.43	1308.51	1308.31	1308.11	1307.91	1307.68	1307.59
15	1308.25	1308.16	1309.02	1308.19	1306.97	1306.66	1308.40	1308.33	1308.09	1307.99	1307.67	1307.60
16	1308.16	1308.34	1309.16	1308.12	1306.94	1306.80	1308.30	1308.31	1308.08	1307.89	1307.66	1307.61
17	1308.05	1308.57	1309.15	1308.06	1306.90	1306.86	1308.21	1308.39	1308.09	1307.88	1307.66	1307.62
18	1307.95	1308.74	1309.15	1308.04	1306.86	1306.88	1308.12	1308.43	1308.11	1307.86	1307.65	1307.80
19	1307.90	1308.78	1309.24	1307.97	1306.83	1306.88	1308.04	1308.37	1308.18	1307.84	1307.65	1307.90
20	1307.86	1308.76	1309.21	1307.92	1306.79	1306.89	1307.99	1308.30	1308.19	1307.83	1307.69	1307.90
21	1307.80	1308.80	1309.15	1307.87	1306.76	1307.07	1308.00	1308.36	1308.20	1307.84	1307.66	1307.91
22	1307.74	1308.83	1309.07	1307.80	1306.74	1307.51	1307.98	1308.38	1308.21	1307.87	1307.65	1307.90
23	1307.67	1308.76	1308.98	1307.74	1306.70	1307.75	1308.00	1308.37	1308.19	1307.86	1307.64	1307.88
24	1307.61	1308.70	1308.89	1307.67	1306.68	1307.96	1308.01	1308.36	1308.18	1307.84	1307.62	1307.87
25	1307.56	1308.63	1308.98	1307.64	1306.67	1307.98	1308.02	1308.34	1308.16	1307.83	1307.62	1307.85
26	1307.54	1308.55	1308.99	1307.65	1306.65	1307.97	1308.03	1308.32	1308.15	1307.81	1307.60	1307.83
27	1307.55	1308.47	1308.90	1307.70	1306.63	1307.96	1308.03	1308.29	1308.14	1307.85	1307.59	1307.81
28	1307.55	1308.40	1308.81	1307.71	1306.60	1307.96	1308.03	1308.26	1308.13	1307.86	1307.58	1307.80
29	1307.55	1308.32	1308.71	1307.69	---	1307.98	1308.03	1308.25	1308.12	1307.85	1307.61	1307.77
30	1307.55	1308.27	1308.61	1307.65	---	1307.96	1308.03	1308.25	1308.10	1307.85	1307.60	1307.76
31	1307.55	---	1308.51	1307.60	---	1307.97	---	1308.24	---	1307.83	1307.60	---
MEAN	1308.25	1308.23	1308.66	1308.02	1307.02	1307.01	1308.36	1308.24	1308.15	1307.91	1307.69	1307.70
MAX	1309.30	1308.83	1309.24	1308.43	1307.56	1307.98	1309.00	1308.43	1308.22	1308.08	1307.82	1307.91
MIN	1307.54	1307.53	1308.03	1307.60	1306.60	1306.36	1307.98	1308.01	1308.08	1307.81	1307.58	1307.54

CAL YR 1977 MEAN 1308.10 MAX 1309.77 MIN 1306.60
WTR YR 1978 MEAN 1307.94 MAX 1309.30 MIN 1306.36

03014500 CHADAKOIN RIVER AT FALCONER, NY

LOCATION.--Lat 42°06'45", long 79°12'15", Chautauqua County, Hydrologic Unit 05010002, on left bank 10 ft (3 m) downstream from South Dow Street Bridge in Falconer, 2.1 mi (3.4 km) upstream from mouth, and 6 mi (10 km) downstream from Chautauqua Lake.

DRAINAGE AREA.--194 mi² (502 km²).

PERIOD OF RECORD.--October 1934 to current year.

REVISED RECORDS.--WSP 803: 1936(M).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,256.41 ft (382.954 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Flow regulated by Chautauqua Lake. Diurnal fluctuation caused by mills upstream from station. Monthly figures for 1951-66 water years adjusted for regulation.

AVERAGE DISCHARGE.--43 years (1935-78), 346 ft³/s (9.799 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,070 ft³/s (58.6 m³/s) Mar. 5, 1976, gage height, 4.67 ft (1.423 m); minimum, 2.7 ft³/s (0.076 m³/s) Nov. 20, 21, 1960, gage height, 0.15 ft (0.046 m); minimum daily, 3.0 ft³/s (0.085 m³/s) Nov. 20, 1960.

EXTREMES FOR CURRENT YEAR.--Maximum peak discharge, 1,340 ft³/s (37.9 m³/s) Oct. 1, gage height, 3.47 ft (1.058 m), occurred on recession following peak of Sept. 26, 1977; maximum independent peak discharge, 1,200 ft³/s (34.0 m³/s) Dec. 19, gage height, 3.21 ft (0.978 m); minimum discharge, 21 ft³/s (0.59 m³/s) Sept. 16, 17, gage height, 0.45 ft (0.137 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1230	68	899	886	604	323	798	60	74	54	65	31
2	1230	68	921	865	594	288	879	59	107	53	68	30
3	1250	69	891	835	580	262	880	58	72	52	70	35
4	1200	77	880	810	561	273	943	57	64	52	67	28
5	1120	71	824	785	546	285	1080	63	67	51	66	28
6	1090	70	862	759	542	280	1090	59	55	50	65	27
7	1030	93	824	731	535	280	1110	59	56	49	64	27
8	937	75	743	790	519	277	1100	57	59	62	62	27
9	1000	73	741	894	502	275	1060	64	48	46	60	26
10	997	235	732	689	492	276	1020	57	43	42	59	25
11	949	704	731	702	484	268	1020	57	43	40	59	26
12	922	750	718	799	473	261	1010	57	45	39	57	34
13	889	739	721	842	448	262	1000	171	44	38	57	22
14	832	728	961	841	431	331	971	301	42	38	57	22
15	776	724	1100	817	421	366	916	429	41	37	58	25
16	781	813	1160	742	416	389	863	428	40	35	51	23
17	793	910	1160	771	413	359	830	648	40	36	49	24
18	675	957	1160	767	401	407	756	830	38	37	47	126
19	552	960	1190	742	395	416	712	812	80	37	55	132
20	424	926	1170	727	365	413	764	577	90	37	43	89
21	626	1020	1170	712	344	497	782	192	75	41	36	63
22	612	1020	1130	684	343	607	495	272	63	39	35	61
23	558	982	1090	660	339	671	166	271	61	33	35	59
24	513	984	1060	636	337	734	160	270	60	32	39	58
25	381	920	1120	626	335	736	172	264	58	31	38	56
26	132	976	1080	637	334	737	76	264	58	32	36	54
27	68	882	1050	598	329	743	71	261	58	47	33	53
28	68	861	1020	631	324	740	66	230	56	30	34	53
29	69	820	989	635	---	746	64	100	55	27	35	51
30	69	811	954	633	---	739	60	86	55	24	30	48
31	68	---	916	616	---	739	---	79	---	24	31	---
TOTAL	21841	18386	29967	22904	12407	13980	20914	7191	1749	1245	1561	1363
MEAN	705	613	967	739	443	451	697	232	58.3	40.2	50.4	45.4
MAX	1250	1020	1190	894	604	746	1110	830	107	62	70	132
MIN	68	68	718	598	324	261	60	57	38	24	30	22

CAL YR 1977 TOTAL 184047 MEAN 504 MAX 1470 MIN 23
WTR YR 1978 TOTAL 153509 MEAN 421 MAX 1250 MIN 22

Lakes in Allegheny River basin

03013946 Chautauqua Lake at Bemus Point, NY (see station for daily mean elevation).

04213440 FRANKS CREEK NEAR WEST VALLEY, NY

LOCATION.--Lat 42°26'59", long 78°38'56", Cattaraugus County, Hydrologic Unit 04120102, on left bank near eastern perimeter of Nuclear Fuels Service, Inc. compound, 0.2 mi (0.3 km) upstream from unnamed tributary, 1.1 mi (1.8 km) upstream from mouth, and 3.5 mi (5.6 km) northwest of West Valley.

DRAINAGE AREA.--0.28 mi² (0.73 km²).

PERIOD OF RECORD.--December 1975 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,340 ft (408 m), from topographic map.

REMARKS.--Records poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 52 ft³/s (1.47 m³/s) Mar. 21, 1978, gage height 3.93 ft (1.198 m); maximum gage height, 4.33 ft (1.320 m) Mar. 14, 1978 (backwater from ice), minimum discharge, no flow, many days each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 15 ft³/s (0.42 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 14	0945	21	0.59	3.14	.957	Mar. 21	1330	*52	1.47	3.93	1.198
Mar. 14	--	31	.88	*a4.33	1.320						

a Ice jam.

Minimum discharge, no flow, many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.8	.04	3.5	.04	.20	.02	2.8	.06	.02	.00	.00	.00
2	1.9	.04	.67	.04	.17	.02	.79	.06	.01	.00	.00	.00
3	1.1	.04	.44	.04	.14	.02	.50	.05	.01	.00	.00	.00
4	.62	.13	.31	.05	.12	.02	4.1	.05	.00	.00	.00	.00
5	.39	.11	.18	.07	.10	.02	3.0	.41	.00	.00	.00	.00
6	.39	.08	.14	.07	.09	.02	1.4	.22	.00	.00	.00	.00
7	.27	.72	.12	.09	.09	.02	1.4	.11	.01	.00	.00	.00
8	.21	.31	.10	4.3	.08	.02	.72	.09	.05	.00	.00	.00
9	1.3	.13	.09	1.4	.08	.03	.45	.35	.03	.00	.01	.00
10	.92	2.9	.08	.48	.07	.04	.41	.24	.01	.00	.01	.00
11	.31	.82	.15	.24	.07	.06	.55	.15	.00	.00	.00	.00
12	.31	.57	.32	.13	.06	.09	1.1	.19	.00	.00	.00	.54
13	.18	.57	.52	.10	.06	.15	.50	.91	.12	.00	.00	.04
14	.15	.48	13	.09	.06	13	.36	2.1	.03	.00	.00	.01
15	.13	2.6	2.8	.08	.05	9.4	.29	.72	.01	.00	.00	.03
16	.21	1.7	1.1	.07	.05	2.5	.26	.38	.00	.00	.00	.24
17	.21	3.5	.77	.06	.05	.82	.26	2.4	.00	.00	.00	.22
18	.13	2.4	3.5	.05	.04	.62	.21	.67	.00	.00	.00	.63
19	.10	1.2	1.3	.04	.04	.56	.18	.38	.04	.00	.03	.45
20	.11	.98	.67	.04	.04	.82	.42	1.1	.01	.00	.01	.09
21	.10	2.4	.52	.03	.04	28	.48	1.3	.03	.00	.00	.04
22	.09	.92	.27	.03	.03	6.4	.40	.38	.02	.00	.00	.03
23	.09	.52	.18	.03	.03	5.2	.24	.24	.00	.00	.00	.02
24	.08	.62	.18	.03	.03	1.4	.13	.18	.00	.00	.00	.01
25	.07	.39	1.4	.25	.03	.60	.11	.13	.00	.00	.00	.01
26	.07	.44	.52	1.0	.03	.66	.09	.09	.00	.00	.00	.00
27	.07	.31	.13	.64	.03	1.0	.08	.08	.00	.00	.00	.00
28	.07	.39	.09	.45	.03	1.1	.07	.07	.00	.00	.00	.00
29	.06	.39	.08	.35	---	.93	.06	.06	.00	.00	.00	.00
30	.05	.82	.06	.29	---	.66	.07	.04	.00	.00	.00	.00
31	.05	---	.05	.24	---	.86	---	.03	---	.00	.00	---
TOTAL	13.54	26.52	33.24	10.82	1.91	75.06	21.43	13.24	.40	.00	.06	2.36
MEAN	.44	.88	1.07	.35	.068	2.42	.71	.43	.013	.000	.002	.079
MAX	3.8	3.5	13	4.3	.20	28	4.1	2.4	.12	.00	.03	.63
MIN	.05	.04	.05	.03	.03	.02	.06	.03	.00	.00	.00	.00
CFSM	1.57	3.14	3.82	1.25	.24	8.64	2.54	1.54	.05	.000	.007	.28
IN.	1.79	3.50	4.38	1.43	.25	9.90	2.83	1.75	.05	.00	.01	.31

CAL YR 1977 TOTAL 358.70 MEAN .98 MAX 25 MIN .00 CFSM 3.50 IN 47.32
WTR YR 1978 TOTAL 198.58 MEAN .54 MAX 28 MIN .00 CFSM 1.93 IN 26.20

04213500 CATTARAUGUS CREEK AT GOWANDA, NY
(National stream-quality accounting network station)

LOCATION.--Lat 42°27'50", long 78°56'10", Erie County, Hydrologic Unit 04120102, on right bank 380 ft (116 m) downstream from bridge on State Highways 39 and 62 at Gowanda, and 4.2 mi (6.8 km) downstream from South Branch. Water-quality sampling site at discharge station.

DRAINAGE AREA.--432 mi^2 (1,119 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1939 to current year.

REVISED RECORDS.--WSP 1912: Drainage area. WRD NY 1971: 1956(M). WRD NY 1974: 1940-42 (M, P).

GAGE.--Water-stage recorder. Datum of gage is 738.85 ft (225.201 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1969, at datum 0.11 ft (0.034 m) lower.

REMARKS.--Records good except those for winter periods and periods of doubtful gage-height record, June 24 to Aug. 1, which are fair. Flow regulated by several industrial plants upstream from station. Diurnal fluctuation at low and medium flow caused by industrial plants at Gowanda and by powerplant 20 mi (32 km) upstream from station.

AVERAGE DISCHARGE.--38 years (1940-78), 735 ft^3/s (20.82 m^3/s), 23.10 in/yr (587 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 34,600 ft^3/s (980 m^3/s) Mar. 7, 1956, gage height, 14.14 ft (4.310 m); minimum, about 6 ft^3/s (0.17 m^3/s) Aug. 21, 1941, result of regulation; minimum gage height, 0.90 ft (0.274 m) Oct. 26, 1951; minimum daily discharge, 52 ft^3/s (1.47 m^3/s) Sept. 13, 1945, Aug. 1, 1955.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 8,000 ft^3/s (227 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Dec. 14	2400	12,800	362	8.89	2.710
Dec. 18	2130	8,140	231	7.21	2.198
Mar. 14	1830	ice jam		*11.41	3.478
Mar. 21	2100	8,030	227	7.17	2.185
Apr. 1	2130	9,310	264	7.66	2.335
Apr. 5	0200	*15,200	430	9.63	2.935

Minimum discharge, 78 ft^3/s (2.21 m^3/s) Aug. 25, gage height, 1.07 ft (0.326 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2650	356	3700	720	720	330	5770	440	298	160	150	133
2	3250	351	1900	620	700	320	4940	440	290	160	152	120
3	2290	347	1300	560	640	310	2260	419	279	160	124	145
4	1510	507	1100	600	600	300	3160	399	271	230	157	157
5	1110	764	940	680	580	300	8880	545	271	210	136	127
6	993	532	840	660	560	290	2850	705	264	190	138	122
7	855	686	780	620	560	280	3140	539	260	170	147	120
8	756	1310	720	1640	540	290	2410	477	353	150	150	131
9	1380	714	700	4070	520	300	1440	504	390	170	145	150
10	1590	1650	620	1090	500	340	1200	575	290	170	287	147
11	985	2780	640	1000	490	380	1370	482	264	150	189	157
12	847	1340	640	980	480	440	1810	434	253	150	138	678
13	756	1150	900	960	470	560	1260	493	298	140	138	358
14	679	1060	7420	840	440	1600	991	1450	287	130	129	207
15	645	1220	8390	740	430	3470	834	2280	243	130	138	220
16	632	2910	3250	660	430	2160	782	895	230	130	127	390
17	632	3250	2200	620	420	1510	719	2180	230	130	145	395
18	639	4140	4330	580	410	1090	651	1860	233	130	136	563
19	598	2600	4740	540	400	927	618	950	290	120	133	841
20	625	1800	2540	520	390	847	671	712	283	120	187	424
21	578	2400	1990	490	380	3500	1030	1550	267	120	155	275
22	526	2200	1600	470	370	5270	983	895	271	120	147	230
23	495	1600	1260	450	370	4950	1050	664	239	110	122	201
24	467	1200	1150	440	370	3750	761	569	230	110	114	178
25	445	940	2350	480	360	2030	651	510	210	110	106	178
26	424	820	1200	1300	350	1490	575	450	200	140	118	178
27	413	760	920	1600	340	1780	533	409	190	350	118	170
28	408	720	840	1200	340	1760	499	376	180	380	125	164
29	388	700	780	960	---	2180	488	358	180	240	187	143
30	384	800	800	840	---	1510	455	336	170	190	155	145
31	374	---	760	780	---	1930	---	315	---	160	145	---
TOTAL	28324	41607	61300	27710	13160	46194	52781	23211	7714	5130	4538	7447
MEAN	914	1387	1977	894	470	1490	1759	749	257	165	146	248
MAX	3250	4140	8390	4070	720	5270	8880	2280	390	380	287	841
MIN	374	347	620	440	340	280	455	315	170	110	106	120
CFSM	2.12	3.21	4.58	2.07	1.09	3.45	4.07	1.73	.60	.38	.34	.57
IN.	2.44	3.58	5.28	2.39	1.13	3.98	4.55	2.00	.66	.44	.39	.64

CAL YR 1977 TOTAL 431285 MEAN 1182 MAX 12600 MIN 173 CFSM 2.74 IN 37.14
WTR YR 1978 TOTAL 319116 MEAN 874 MAX 8880 MIN 106 CFSM 2.02 IN 27.48

04213500 CATTARAUGUS CREEK AT GOWANDA, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1959, 1963-64, 1972 to current year.
CHEMICAL DATA: 1959 (e), 1963 (b), 1972 (a), 1975 (b), 1976-78 (c).
MINOR ELEMENTS DATA: 1972-74 (a), 1975 (b), 1976-77 (c), 1978 (d).
ORGANIC DATA: TOC--1975 (b), 1976-77 (c), 1978 (d).
NUTRIENT DATA: 1975 (b), 1976-77 (c), 1978 (d).
BIOLOGICAL DATA:
Coliform bacteria--1978 (d).
Phytoplankton--1978 (c).
SEDIMENT DATA: 1964 (b), 1978 (c).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1958 to September 1959, unpublished; January to September 1978.
pH: October 1958 to September 1959, unpublished.
WATER TEMPERATURES: October 1958 to September 1959, January to September 1978.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 952 micromhos Oct. 7, 1958; minimum daily, 166 micromhos Feb. 1, 1959.
WATER TEMPERATURES: Maximum daily, 29.0°C Aug. 19, 1978; minimum daily, freezing point on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum daily, 490 micromhos Aug. 3; minimum daily, 177 micromhos Apr. 2.
WATER TEMPERATURES: Maximum daily, 29.0°C Aug. 19; minimum daily, freezing point on many days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	PH (UNITS)	TUR-BID-ITY (JTU)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, CHEM-ICAL (LOW LEVEL) (MG/L)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)
OCT												
05...	1300	1120	7.6	--	45	9.0	84	55	--	210	--	--
26...	1200	429	7.6	--	10	9.7	90	2	--	72	--	--
NOV												
14...	1200	1050	7.0	--	40	12.6	95	10	--	520	--	140
DEC												
08...	1300	723	7.0	--	15	13.9	95	11	--	78	--	--
JAN												
17...	1330	623	7.4	9	9.0	12.8	88	1	--	54	K123	150
MAR												
14...	1300	400	7.5	200	200	12.4	85	20	--	210	5200	130
APR												
12...	1300	2010	7.2	100	200	11.0	95	15	--	110	2400	95
MAY												
11...	1400	494	7.6	6	6.0	8.8	87	15	--	K1	47	140
JUN												
06...	1300	257	7.6	2	2.0	8.3	92	15	--	K9	19	170
JUL												
13...	1330	146	7.7	--	9.0	8.0	95	--	--	K16	K10	190
31...	1200	157	7.6	--	11	8.1	92	--	19	K67	23	180
SEP												
06...	1400	123	7.6	--	15	8.0	96	--	15	54	K15	170

DATE	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
OCT												
05...	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--	--
NOV												
14...	34	44	7.5	6.2	1.8	130	0	110	25	9.8	--	--
DEC												
08...	--	--	--	--	--	--	--	--	--	--	--	--
JAN												
17...	32	46	7.7	8.0	1.4	140	0	110	29	11	.1	5.6
MAR												
14...	33	40	7.7	12	1.6	120	0	98	34	17	.0	4.2
APR												
12...	23	30	4.8	4.7	1.3	87	0	71	19	7.8	.1	3.7
MAY												
11...	35	44	7.8	8.2	1.4	130	0	110	29	11	.1	2.5
JUN												
06...	35	52	8.8	12	1.7	160	0	130	34	17	.1	2.6
JUL												
13...	49	56	12	17	1.8	--	--	140	38	25	.1	3.0
31...	40	54	11	11	2.0	--	--	140	45	16	.1	4.0
SEP												
06...	38	49	11	20	2.1	--	--	130	41	29	.3	2.4

K Results based on colony count outside the acceptable range (non-ideal colony count).

04213500 CATTARAUGUS CREEK AT GOWANDA, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)
OCT												
05...	61	173	--	1.1	.06	.21	.27	--	1.4	.06	--	.00
26...	32	248	--	1.5	.17	.10	.27	--	1.8	.02	--	.00
NOV												
14...	73	180	--	.87	.05	.38	.43	--	1.3	.04	--	.01
DEC												
08...	20	166	--	1.3	.13	.15	.28	--	1.6	.02	--	.01
JAN												
17...	7	183	178	1.7	.15	.06	.21	.28	1.9	.01	.00	--
MAR												
14...	264	193	176	1.2	.14	.78	.92	.36	2.1	.11	.00	--
APR												
12...	207	121	114	.88	.05	.47	.52	.16	1.4	.10	.00	--
MAY												
11...	2	192	168	1.2	.11	.24	.35	--	1.6	.01	.00	--
JUN												
06...	0	225	207	1.2	.25	.18	.43	.40	1.6	.01	.00	--
JUL												
13...	--	283	237	.87	.52	.40	.92	.66	1.8	.01	.00	--
31...	55	259	227	.81	.23	.16	.39	.36	1.2	.01	.00	--
SEP												
06...	3	270	233	.54	.38	.32	.70	.65	1.2	.01	.00	--

DATE	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)
OCT												
05...	0	--	--	--	0	--	10	--	--	--	7	--
26...	1	--	--	--	0	--	20	--	--	--	6	--
NOV												
14...	1	--	--	--	0	--	<10	--	--	--	6	--
DEC												
08...	0	--	--	--	0	--	<10	--	--	--	5	--
JAN												
17...	0	--	--	--	1	--	<10	--	--	--	5	--
MAR												
14...	1	0	0	0	0	0	10	2	2	1	10	2
APR												
12...	2	--	--	--	0	--	20	--	--	--	13	--
MAY												
11...	1	0	0	0	0	0	<10	0	0	0	1	1
JUN												
06...	2	--	--	--	0	--	10	--	--	--	5	--
JUL												
13...	1	1	0	--	3	0	10	2	0	0	4	2
31...	1	--	--	--	1	--	10	--	--	--	5	--
SEP												
06...	1	1	0	0	1	0	10	2	2	1	3	1

04213500 CATTARAUGUS CREEK AT GOWANDA, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)
OCT												
05...	3000	--	21	--	--	--	<.5	--	--	--	--	--
26...	1400	--	17	--	--	--	<.5	--	--	--	--	--
NOV												
14...	2700	--	10	--	--	--	<.5	--	--	--	--	--
DEC												
08...	1300	--	5	--	--	--	<.5	--	--	--	--	--
JAN												
17...	600	--	2	--	--	--	<.5	--	--	--	--	--
MAR												
14...	10000	70	24	0	170	20	<.5	<.5	0	0	0	0
APR												
12...	7900	--	7	--	--	--	<.5	--	--	--	--	--
MAY												
11...	400	20	4	0	20	10	<.5	<.5	0	0	0	0
JUN												
06...	200	--	2	--	--	--	<.5	--	--	--	--	--
JUL												
13...	620	20	50	0	20	10	.5	.5	0	0	--	0
31...	930	--	7	--	--	--	<.5	--	0	--	--	--
SEP												
06...	900	30	10	2	30	10	<.5	<.5	0	0	0	0

DATE	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)	OIL AND GREASE (MG/L)
OCT						
05...	20	--	12	--	--	0
26...	20	--	1.0	--	--	0
NOV						
14...	10	--	11	--	--	1
DEC						
08...	10	--	3.0	--	--	0
JAN						
17...	30	--	9.3	--	--	0
FEB						
14...	10	--	3.6	--	--	--
MAR						
14...	30	10	6.4	2.8	3.6	2
APR						
12...	30	--	2.6	--	--	0
MAY						
11...	20	0	12	10	1.9	0
JUN						
06...	30	--	8.1	--	--	0
JUL						
13...	30	0	--	1.1	--	--
31...	30	--	2.0	--	--	0
SEP						
06...	20	0	5.4	4.2	1.2	0

04213500 CATTARAUGUS CREEK AT GOWANDA, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SAMPLING DEPTH (FT)	SAMPLE LOCATION, CROSS SECTION (FT FM L BANK)	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
JAN					
17...	1235	1.0	15	400	.0
17...	1240	1.0	35	405	.0
17...	1245	1.0	55	410	.0
17...	1250	1.0	75	400	.5
17...	1255	1.0	95	400	.5
17...	1300	1.0	115	405	.0
APR					
12...	1305	2.0	10	235	9.0
12...	1310	2.0	30	230	8.5
12...	1315	2.0	50	230	8.5
12...	1320	2.0	70	235	9.0
12...	1325	2.0	90	240	9.0
12...	1330	2.0	110	235	9.0
MAY					
11...	1305	1.0	15	335	14.5
11...	1310	1.0	35	340	14.5
11...	1315	1.0	55	340	14.0
11...	1320	1.0	75	335	14.5
11...	1325	1.0	95	330	14.5
11...	1330	1.0	115	330	14.5
JUN					
06...	1315	1.0	15	395	19.0
06...	1320	1.0	35	390	19.5
06...	1325	1.0	55	395	19.0
06...	1330	1.0	75	400	19.0
06...	1335	1.0	95	390	19.5
06...	1340	1.0	115	390	19.5
JUL					
13...	1305	1.0	15	440	23.0
13...	1310	1.0	35	445	23.0
13...	1315	1.0	55	435	23.5
13...	1320	1.0	75	440	23.5
13...	1325	1.0	95	440	23.0
13...	1330	1.0	115	440	23.0
31...	1205	1.0	15	400	21.0
31...	1210	1.0	35	405	21.0
31...	1215	1.0	55	400	20.5
31...	1220	1.0	75	410	21.0
31...	1225	1.0	95	415	20.0
31...	1230	1.0	115	400	21.0

DATE	TIME	SAMPLING DEPTH (FT)	SAMPLE LOCATION, CROSS SECTION (FT FM L BANK)	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
SEP					
06...	1235	1.0	15	440	24.0
06...	1240	1.0	35	445	24.5
06...	1245	1.0	55	450	24.5
06...	1250	1.0	75	440	24.0
06...	1255	1.0	95	440	23.5
06...	1300	1.0	115	440	24.0

SUSPENDED-SEDIMENT MEASUREMENTS, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)
APR				
12...	1300	2010	209	1130
MAY				
11...	1400	494	6	11
JUN				
06...	1300	257	6	4.2
JUL				
13...	1330	146	14	5.5
31...	1200	157	25	11
SEP				
06...	1400	123	21	7.0

04213500 CATTARAUGUS CREEK AT GOWANDA, NY--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

PHYTOPLANKTON

DATE	MAR 14,78	MAY 11,78	JUN 6,78
TIME	1300	1400	1300
TOTAL CELLS/ML	290	340	400
DIVERSITY: DIVISION	0.0	0.0	0.0
.CLASS	0.0	0.0	0.0
..ORDER	0.0	0.0	0.0
...FAMILY	0.0	2.0	0.5
....GENUS	0.0	2.0	2.1

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHRYSOPHYTA						
.BACILLARIOPHYCEAE						
..CENTRALES						
...COSCINODISCACEAE						
....CYCLOTELLA	--	-	--	-	45	11
..PENNALES						
...CYMBELLACEAE						
....CYMBELLA	--	-	29	8	89#	22
...DIATOMACEAE						
....DIATOMA	--	-	14	4	22	6
...GOMPHONEMATACEAE						
....GOMPHONEMA	--	-	86#	25	--	-
...NAVICULACEAE						
....NAVICULA	--	-	86#	25	130#	33
...NITZSCHIACEAE						
....NITZSCHIA	--	-	130#	38	110#	28
EUGLENOPHYTA (EUGLENOIDS)						
.EUGLENOPHYCEAE						
..EUGLENALES						
...EUGLENACEAE						
....TRACHELOMONAS	290#	100	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

04213500 CATTARAUGUS CREEK AT GOWANDA, NY--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1				---	318	360	198	350	370	387	420	395
2				---	323	362	177	355	375	384	424	385
3				---	323	358	203	350	380	389	490	385
4				---	336	350	225	355	385	380	389	418
5				---	359	350	190	310	385	363	388	400
6				---	378	362	200	310	400	367	389	---
7				---	359	370	192	320	380	365	405	415
8				---	348	368	195	330	380	405	435	395
9				---	355	370	232	340	377	405	371	425
10				---	358	364	248	315	377	415	379	423
11				---	349	360	247	330	388	435	379	430
12				---	348	360	218	320	380	435	379	435
13				---	343	365	242	322	388	418	395	435
14				---	358	352	276	282	390	420	392	437
15				---	358	262	276	226	392	400	389	390
16				---	358	262	290	270	398	405	419	393
17				326	340	260	305	272	378	418	420	372
18				333	352	264	328	224	375	410	385	418
19				331	312	274	320	260	378	416	370	418
20				336	370	290	318	285	410	418	380	420
21				329	372	263	280	247	405	419	395	422
22				330	370	202	280	268	408	398	422	421
23				328	368	200	260	312	399	393	422	418
24				359	354	200	290	310	396	439	422	410
25				348	350	224	300	318	406	440	460	405
26				312	352	243	322	316	402	420	403	430
27				299	368	238	322	340	420	410	402	430
28				252	365	236	325	338	387	410	418	432
29				273	---	214	315	345	385	400	420	433
30				273	---	242	330	384	385	395	420	410
31				297	---	220	---	395	---	387	420	---
MEAN				315	352	295	263	313	389	405	407	414

WTR YR 1978 MEAN 352 MAX 490 MIN 177

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1				---	.0	.0	5.0	7.0	20.0	23.0	21.0	23.5
2				---	.0	.0	4.5	8.0	23.0	22.5	21.0	23.5
3				---	.0	.0	3.0	9.0	20.5	19.0	23.5	20.5
4				---	.0	.0	4.5	9.0	18.0	22.0	24.0	23.0
5				---	.0	.0	5.0	10.0	18.0	22.5	23.0	22.5
6				---	.0	.0	3.5	11.0	24.0	23.0	23.0	---
7				---	.0	.0	4.5	11.5	22.0	23.5	22.5	22.5
8				---	.0	.0	5.0	12.0	19.0	24.0	22.0	22.5
9				---	.0	.0	5.5	11.5	22.0	23.5	22.0	22.0
10				---	.0	.0	5.5	11.0	23.0	24.5	25.0	22.0
11				---	.0	.0	10.0	11.0	24.5	20.0	24.0	23.0
12				---	.0	.0	7.0	16.0	24.0	20.0	26.0	21.0
13				---	.0	.5	11.0	15.5	17.5	23.0	27.0	20.0
14				---	.0	.0	8.0	14.0	16.0	22.5	28.0	19.5
15				---	.0	.0	7.0	14.0	16.0	23.0	27.0	20.5
16				---	.0	.5	8.0	14.0	22.5	24.0	26.0	20.5
17				---	.0	.5	10.0	13.0	22.5	24.5	26.0	17.0
18				.0	.0	.0	9.0	15.0	23.0	25.0	27.0	18.0
19				.0	.0	2.0	9.0	19.0	22.5	25.5	29.0	18.0
20				.0	.0	1.0	9.0	20.0	25.0	25.0	24.5	19.0
21				.0	.0	4.0	7.5	16.0	25.0	26.0	25.5	19.0
22				.0	.0	2.0	7.0	18.0	24.5	27.0	26.0	15.0
23				.0	.0	2.0	10.5	17.0	22.0	28.0	27.0	19.0
24				.0	.0	1.0	12.0	17.0	22.5	26.0	26.5	18.0
25				1.0	.0	1.5	10.0	19.0	23.0	22.0	22.5	17.5
26				1.0	.0	2.5	11.0	22.0	23.0	27.0	25.0	16.5
27				.0	.0	2.5	11.0	25.0	25.0	26.0	25.0	16.0
28				.0	.0	3.0	11.0	27.0	24.0	21.5	24.5	16.0
29				.0	---	3.0	13.0	27.0	24.0	22.0	23.5	16.5
30				.0	---	4.0	12.0	25.0	24.5	23.0	23.0	17.5
31				.0	---	4.0	---	25.0	---	19.5	23.0	---
MEAN				.0	.0	1.0	8.0	16.0	22.0	23.5	24.5	19.5

WTR YR 1978 MEAN 13.5 MAX 29.0 MIN .0

04214020 CATTARAUGUS CREEK AT IRVING, NY

LOCATION.--Lat 42°34'12", long 79°06'45", at Chautauqua-Erie County line, Hydrologic Unit 04120102, at bridge on Buffalo Road in Irving, 0.4 mi (0.6 km) downstream from bridge on U.S. Highway 20 and State Highway 5, and 1.5 mi (2.4 km) upstream from mouth.

DRAINAGE AREA.--554 mi² (1,435 km²) at mouth.

PERIOD OF RECORD.--Water years 1972 to current year.
CHEMICAL DATA: 1975 (b), 1976-77 (c), 1978 (d).
MINOR ELEMENTS DATA: 1972-74 (a), 1975 (b), 1976-77 (c), 1978 (d).
NUTRIENT DATA: 1975 (b), 1976-77 (c), 1978 (d).
BIOLOGICAL DATA:
Coliform bacteria--1975 (b), 1977 (c), 1978 (d).

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (NTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L)
OCT										
05...	1600	1400	340	7.4	12.0	45	8.8	82	--	--
26...	1400	540	400	7.4	12.0	4.0	9.2	86	2	--
NOV										
14...	1400	1320	330	7.2	3.0	25	12.1	91	10	--
DEC										
08...	1500	900	355	6.9	.0	15	13.0	89	9	--
JAN										
17...	1200	760	415	7.2	.0	4.0	10.1	69	14	--
FEB										
14...	1200	380	400	7.0	.0	3.0	10.6	73	6	--
MAR										
14...	1130	500	425	7.7	.0	7.0	10.2	70	5	--
APR										
12...	1130	2510	275	7.2	6.5	200	11.2	90	25	--
MAY										
11...	1130	620	352	7.6	11.5	3.0	9.0	89	20	--
JUN										
06...	1130	320	410	7.7	18.0	1.0	7.8	87	10	--
JUL										
13...	1130	160	420	7.2	23.0	2.0	8.2	96	--	15
31...	1430	200	420	7.2	22.0	6.0	7.6	86	--	5
SEP										
06...	1200	150	410	7.9	23.0	6.0	7.5	88	--	21

DATE	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	CALCIUM TOTAL RECOVERABLE (MG/L AS CA)	MAGNESIUM, TOTAL RECOVERABLE (MG/L AS MG)	SODIUM, TOTAL RECOVERABLE (MG/L AS NA)	POTASSIUM, TOTAL RECOVERABLE (MG/L AS K)	CARBONATE (MG/L AS CO3)	BICARBONATE (MG/L AS HCO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)
OCT										
05...	210	--	--	--	--	--	--	--	--	191
26...	K126	--	--	--	--	--	--	--	--	230
NOV										
14...	710	--	--	--	--	0	120	26	11	188
DEC										
08...	310	--	--	--	--	--	--	--	--	175
JAN										
17...	260	--	--	--	--	--	--	--	--	220
FEB										
14...	62	--	--	--	--	0	140	33	15	206
MAR										
14...	86	--	--	--	--	--	--	--	--	208
APR										
12...	285	--	--	--	--	--	--	--	--	139
MAY										
11...	30	--	--	--	--	0	140	32	12	148
JUN										
06...	39	--	--	--	--	--	--	--	--	240
JUL										
13...	150	--	--	--	--	--	--	--	--	262
31...	K760	--	--	--	--	--	--	--	--	269
SEP										
06...	220	39	8.5	9.7	1.7	--	--	43	17	267

K Results based on colony count outside the acceptable range (non-ideal colony count).

04214020 CATTARAUGUS CREEK AT IRVING, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)
OCT									
05...	62	.07	.38	.31	1.4	.06	.01	1	0
26...	15	.10	.56	.46	2.0	.02	.00	0	1
NOV									
14...	63	.08	.42	.34	1.2	.04	.00	1	0
DEC									
08...	32	.11	.29	.18	1.5	.02	.00	0	0
JAN									
17...	5	.09	.24	.15	1.7	.01	.00	0	1
FEB									
14...	10	.10	.30	.20	1.8	.02	.00	1	0
MAR									
14...	16	.08	.36	.28	1.2	.02	.00	0	0
APR									
12...	232	.04	.56	.52	1.2	.12	.00	0	0
MAY									
11...	3	.04	.22	.18	1.3	.00	.00	0	0
JUN									
06...	3	.03	.21	.18	1.2	.01	.00	2	0
JUL									
13...	14	.04	.36	.32	1.2	.01	--	1	0
31...	9	.00	.44	.44	1.2	.02	--	1	1
SEP									
06...	5	.01	.15	.14	.79	.01	--	0	1

DATE	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	OIL AND GREASE (MG/L)
OCT									
05...	10	8	3600	25	<.5	20	6.7	--	0
26...	10	2	670	14	<.5	20	3.2	--	1
NOV									
14...	50	6	2100	3	<.5	10	12	--	1
DEC									
08...	40	5	1100	4	<.5	10	3.6	--	0
JAN									
17...	<10	4	500	10	<.5	10	6.7	--	0
FEB									
14...	<10	4	460	5	<.5	10	3.4	.00	0
MAR									
14...	10	3	740	6	<.5	10	.8	.10	0
APR									
12...	20	13	8200	1	<.5	30	5.3	.00	4
MAY									
11...	10	1	310	4	<.5	20	11	.00	1
JUN									
06...	10	5	540	4	<.5	20	2.0	.00	0
JUL									
13...	10	3	400	7	.5	30	--	--	0
31...	<10	10	500	6	<.5	20	12	--	1
SEP									
06...	10	3	450	8	<.5	30	1.7	--	0

04214500 BUFFALO CREEK AT GARDENVILLE, NY

LOCATION.--Lat 42°51'16", long 78°45'22", Erie County, Hydrologic Unit 04120103, on left bank 300 ft (91 m) downstream from bridge on Union Road in Gardenville, and 2 mi (3 km) upstream from Cayuga Creek.

DRAINAGE AREA.--144 mi^2 (373 km^2).

PERIOD OF RECORD.--October 1938 to current year.

REVISED RECORDS.--WSP 1337: 1939-52. WSP 1912: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 603.65 ft (183.993 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 26, 1968, water-stage recorder at site 400 ft (122 m) downstream at same datum.

REMARKS.--Records fair except those for winter periods, which are poor.

AVERAGE DISCHARGE.--40 years, 197 ft^3/s (5.579 m^3/s), 18.58 in/yr (472 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,300 ft^3/s (320 m^3/s) Mar. 1, 1955, Mar. 7, 1956, from rating curve extended above 3,200 ft^3/s (90.6 m^3/s) on basis of slope-area measurement at gage height 7.07 ft (2.155 m); maximum gage height, 14.11 ft (4.301 m) Feb. 16, 1976 (ice jam); minimum discharge, 0.2 ft^3/s (0.006 m^3/s) Sept. 1, 1964, gage height, 0.81 ft (0.247 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,200 ft^3/s (119 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Dec. 14	2000	6,120	173	7.34	2,237
Mar. 15	0830	a5,600	159	*b10.52	3.206
Mar. 21	2230	*a7,000	198	b14.34	4.371
Apr. 5	0400	5,910	167	7.22	2.201

a About.
b Backwater from ice.

Minimum daily discharge, 9.9 ft^3/s (0.28 m^3/s) July 21-26; minimum gage height, 0.57 ft (0.174 m) July 24, 26.

REVISIONS.--The peak discharges and annual maximum (*) for water years 1939 to 1976 and daily discharge for June 23, 1972, have been revised as shown in the following table. They supersede figures published in WSP 1307, 1337, 1677, 1727, 1912, 2112 and the reports for 1971-76.

Water year	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
1939	Feb. 20, 1939	0200	*7,290	206	*7.62	2.323
1940	Mar. 31, 1940	1915	*6,010	170	6.90	2.103
1941	Apr. 5, 1941	1630	*6,390	181	7.13	2.173
1942	Mar. 9, 1942	1200	4,600	130	*a11.90	3.627
	Mar. 17, 1942	0800	*9,200	261	a8.80	2.682
1943	Dec. 30, 1942	1330	4,880	138	6.17	1.881
	Apr. 28, 1943	0600	*5,500	156	6.58	2.006
1944	Apr. 12, 1944	1700	5,050	143	6.28	1.914
	June 24, 1944	0715	*5,750	163	*6.74	2.054
1945	Mar. 4, 1945	0030	*5,500	156	6.58	2.006
1946	Oct. 2, 1945	0745	*6,850	194	*7.39	2.252
1947	Jan. 31, 1947	0245	4,960	140	6.22	1.896
	Apr. 5, 1947	2030	*6,780	192	*7.35	2.240
	June 3, 1947	0700	4,420	125	5.86	1.786
1948	Feb. 19, 1948	2400	*5,020	142	6.26	1.908
	Mar. 20, 1948	0230	4,240	120	5.73	1.747
	Mar. 22, 1948	0700	4,510	128	5.92	1.804
1949	Jan. 5, 1949	2215	*4,160	118	5.67	1.728
1950	Mar. 28, 1950	0130	*6,530	185	*7.21	2.198
1951	Dec. 3, 1950	2400	*7,370	209	*7.66	2.335
	Jan. 4, 1951	0700	6,030	171	6.91	2.106
	Mar. 31, 1951	0145	4,990	141	6.24	1.902
1952	Mar. 11, 1952	1245	*6,290	178	b7.22	2.201
1953	May 26, 1953	1500	*7,820	221	*7.88	2.402
1954	Feb. 16, 1954	2130	*5,770	163	*6.75	2.057
	Mar. 25, 1954	1715	5,200	147	6.38	1.945
1955	Dec. 28, 1954	2315	4,340	123	5.80	1.768
	Mar. 1, 1955	1400	*11,300	320	*9.43	2.874
1956	Dec. 4, 1955	1430	4,500	127	5.91	1.801
	Mar. 7, 1956	0900	*11,300	320	*9.42	2.871
	Mar. 8, 1956	1030	4,980	141	6.23	1.899
	Apr. 29, 1956	0100	4,920	139	6.19	1.887
1957	Jan. 23, 1957	0230	*9,920	281	8.84	2.694
	Feb. 27, 1957	2215	4,400	125	5.84	1.780
	Apr. 6, 1957	0230	5,080	144	6.30	1.920
	May 20, 1957	0415	4,520	128	5.93	1.807
1958	June 13, 1958	1500	*3,960	112	5.52	1.682
1959	Jan. 22, 1959	0300	*a8,800	249	a8.37	2.551
	Apr. 2, 1959	1400	5,880	167	6.82	2.079
1960	Dec. 12, 1959	2215	4,340	123	5.79	1.765
	Feb. 11, 1960	0730	4,640	131	6.01	1.832
	Mar. 30, 1960	2115	*a6,640	188	a7.43	2.265
1961	Feb. 26, 1961	0400	5,290	150	6.44	1.963
	Apr. 25, 1961	0600	*8,560	242	*8.23	2.509
1962	Jan. 27, 1962	0415	*4,370	124	5.82	1.774
1963	Mar. 17, 1963	2130	*5,530	157	6.60	2.012
	Mar. 26, 1963	2400	4,560	129	5.95	1.814
1964	Mar. 5, 1964	0900	*5,200	147	*a8.45	2.576
1965	Apr. 7, 1965	1200	*3,540	100	5.23	1.594
1966	Feb. 11, 1966	1215	*3,820	108	5.43	1.655
1967	Sept. 29, 1967	0515	*9,150	259	8.50	2.591
1968	Jan. 30, 1968	1000	*4,200	119	5.70	1.737
1969	Dec. 28, 1968	2130	*6,720	190	*7.66	2.335
	Jan. 31, 1969	0330	4,960	140	6.66	2.030
	Apr. 2, 1969	1445	6,150	174	7.36	2.243
	Apr. 19, 1969	0730	4,320	122	6.25	1.905
	May 18, 1969	0730	5,610	159	7.06	2.152
1970	Dec. 11, 1969	0800	*6,130	174	*7.35	2.240
	Apr. 2, 1970	1530	6,000	170	7.28	2.219
1971	Nov. 28, 1970	1330	*4,400	125	6.30	1.920
	Mar. 15, 1971	2100	4,310	122	6.24	1.902
1972	Mar. 2, 1972	1400	8,200	232	a8.89	2.710
	June 23, 1972	1030	*9,930	281	*9.09	2.771
1973	Dec. 6, 1972	1830	*7,660	217	*8.12	2.475
	Mar. 17, 1973	1600	4,420	125	6.31	1.923
1974	Dec. 16, 1973	0730	4,500	127	6.37	1.942
	Mar. 5, 1974	1200	*4,990	141	6.68	2.036
1975	Jan. 29, 1975	2300	*8,910	252	*8.67	2.643
	Feb. 24, 1975	1730	4,550	129	6.40	1.951
1976	Feb. 17, 1976	0830	4,810	136	6.57	2.003
	Feb. 22, 1976	0900	5,370	152	6.92	2.109
	Mar. 3, 1976	1530	*8,240	233	8.38	2.554
	July 30, 1976	0200	5,150	146	6.78	2.067

a Backwater from ice.
b Backwater from debris.

June 23, 1972.........5,470

Month	Total	Mean	Max	Min	CFSM	In.
June 1972	9,646	322	5,470	48	2.24	2.49
Water Year 1972	82,898	226	5,470	12	1.57	21.41
Cal. Year 1972	102,319	280	5,470	12	1.94	26.43

04214500 BUFFALO CREEK AT GARDENVILLE, NY--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	719	84	1430	140	150	88	1550	101	58	24	18	16
2	892	77	436	130	140	86	865	99	56	23	16	16
3	524	75	292	120	130	84	396	92	51	22	22	16
4	317	130	263	120	120	84	669	84	47	24	39	16
5	232	429	230	130	120	82	2460	115	49	29	27	16
6	227	198	210	140	120	80	537	197	54	26	21	16
7	189	378	190	150	120	80	758	135	69	22	22	15
8	168	473	170	1600	120	82	449	117	136	20	23	18
9	403	219	160	560	110	84	289	146	123	19	22	19
10	390	600	150	340	110	88	264	166	75	19	21	20
11	218	863	140	260	110	96	294	118	58	18	21	18
12	255	401	150	210	110	120	410	99	49	16	21	35
13	212	375	420	190	110	350	265	111	54	15	19	48
14	165	323	3000	170	100	1900	219	992	59	14	18	27
15	156	327	2820	150	100	4200	190	716	47	12	20	27
16	148	779	830	140	100	2500	176	255	40	12	22	47
17	154	910	539	130	98	1700	166	995	39	12	21	58
18	165	1520	1760	120	98	900	152	643	43	11	21	157
19	137	714	1620	120	96	470	145	296	46	10	22	534
20	152	419	607	110	96	580	182	205	54	10	33	100
21	141	616	477	110	94	4300	456	548	142	9.9	29	52
22	126	502	375	100	94	2600	373	257	232	9.9	21	39
23	126	288	307	100	94	2000	390	173	88	9.9	18	33
24	111	319	273	96	94	1200	223	141	58	9.9	18	29
25	105	257	845	100	92	500	170	122	43	9.9	17	26
26	101	238	360	320	92	408	148	106	36	9.9	16	26
27	96	215	260	450	92	690	130	94	33	25	16	27
28	91	200	200	310	90	591	119	85	32	32	18	24
29	100	200	170	240	---	686	110	78	31	29	17	23
30	86	210	170	190	---	411	105	72	27	21	18	23
31	78	---	160	160	---	560	---	65	---	22	16	---
TOTAL	6984	12339	19014	7206	3000	27600	12660	7423	1929	546.4	653	1521
MEAN	225	411	613	232	107	890	422	239	64.3	17.6	21.1	50.7
MAX	892	1520	3000	1600	150	4300	2460	995	232	32	39	534
MIN	78	75	140	96	90	80	105	65	27	9.9	16	15
CFSM	1.56	2.85	4.26	1.61	.74	6.18	2.93	1.66	.45	.12	.15	.35
IN.	1.80	3.19	4.91	1.86	.77	7.13	3.27	1.92	.50	.14	.17	.39

CAL YR 1977 TOTAL 131121.0 MEAN 359 MAX 4410 MIN 20 CFSM 2.49 IN 33.87
WTR YR 1978 TOTAL 100875.4 MEAN 276 MAX 4300 MIN 9.9 CFSM 1.92 IN 26.06

04215000 CAYUGA CREEK NEAR LANCASTER, NY

LOCATION.--Lat 42°53'24", long 78°38'45", Erie County, Hydrologic Unit 04120103, on right bank 150 ft (46 m) upstream from low dam in Como Lake Park, 700 ft (210 m) downstream from bridge on Bowen Road, 800 ft (240 m) downstream from Little Buffalo Creek, and 2 mi (3.2 km) southeast of Lancaster.

DRAINAGE AREA.--94.9 mi² (246 km²).

PERIOD OF RECORD.--September 1938 to September 1968. October 1971 to April 1974 (peak discharges only). May 1974 to current year.

GAGE.--Water-stage recorder and low concrete dam as control. Datum of gage is 672.02 ft (204.832 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except those for winter periods, which are poor. Since August 1962, undetermined amount of flow diverted by Lancaster Country Club for irrigation upstream from station. Concrete dam configuration modified in September 1974 resulting in a lower point of zero flow.

AVERAGE DISCHARGE.--34 years (1938-68, 1975-78) 128 ft³/s (3.625 m³/s), 18.32 in/yr (465 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,410 ft³/s (266 m³/s) Sept. 25, 1977, gage height, 10.08 ft (3.072 m); maximum gage height, 12.58 ft (3.834 m) Mar. 30, 1960 (ice jam); practically no flow part of Aug. 8, 9, 1939, when stoplogs were installed in the dam.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,800 ft³/s (79.3 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 15	--	4,200	119	a8.20	2.499	Mar. 15	--	3,200	90.6	a9.16	2.792
Dec. 18	2230	3,530	100	7.15	2.179	Mar. 21	2045	*4,600	130	*a11.74	3.578
Jan. 9	0045	3,240	91.8	6.99	2.131	Apr. 5	0230	4,210	119	7.49	2.283

a Ice jam.

Minimum discharge, 2.1 ft³/s (0.059 m³/s) July 25, gage height, 2.58 ft (0.786 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	613	31	1240	110	120	58	1270	44	24	6.6	3.7	2.6
2	711	30	333	98	120	56	571	44	23	5.3	3.0	2.5
3	438	29	220	90	110	54	267	40	21	6.1	6.4	2.4
4	231	83	189	96	100	54	479	36	19	7.5	31	2.8
5	166	206	110	100	96	54	1660	66	20	6.6	9.0	4.1
6	166	127	120	100	94	52	328	148	20	5.8	5.3	5.8
7	143	227	130	110	92	52	539	83	27	4.9	4.5	5.8
8	123	327	140	880	92	52	285	65	106	4.5	5.1	5.3
9	304	155	130	1400	90	54	183	96	50	4.5	4.5	7.8
10	271	394	110	340	90	58	169	125	29	4.5	3.9	8.4
11	150	604	100	200	88	68	193	68	22	4.1	3.4	6.6
12	203	276	130	170	86	80	289	49	19	3.9	3.1	25
13	193	238	170	150	84	100	180	58	20	3.5	2.8	23
14	131	216	2100	130	82	300	145	555	21	3.5	2.7	14
15	110	231	2500	120	80	2600	123	344	18	3.5	3.1	15
16	102	419	711	110	78	1000	111	145	16	3.4	10	70
17	110	703	412	110	76	430	99	928	15	3.4	6.9	49
18	115	907	1860	100	74	300	85	711	20	3.2	4.5	169
19	89	458	1530	96	72	250	80	206	21	3.0	4.5	720
20	89	238	494	92	70	230	123	143	18	2.7	14	143
21	75	254	388	88	68	2200	400	412	117	2.6	7.8	60
22	66	254	280	84	66	2500	333	169	123	2.4	4.7	32
23	75	174	242	80	66	1900	318	113	35	2.4	3.4	22
24	60	216	213	78	66	867	161	83	19	2.3	3.4	15
25	53	172	720	86	64	339	117	66	13	2.2	11	13
26	49	153	270	240	64	304	85	52	11	2.3	19	11
27	45	123	220	300	60	547	68	46	9.7	14	12	10
28	43	123	180	250	60	465	60	39	8.7	8.4	3.1	8.7
29	39	136	150	190	---	516	52	34	8.4	5.1	3.2	7.8
30	36	145	140	160	---	304	47	30	7.5	4.9	3.0	7.2
31	34	---	130	130	---	400	---	26	---	4.1	2.8	---
TOTAL	5033	7649	15662	6288	2308	16244	8820	5024	881.3	141.2	204.8	1468.8
MEAN	162	255	505	203	82.4	524	294	162	29.4	4.55	6.61	49.0
MAX	711	907	2500	1400	120	2600	1660	928	123	14	31	720
MIN	34	29	100	78	60	52	47	26	7.5	2.2	2.7	2.4
CFSM	1.71	2.69	5.32	2.14	.87	5.52	3.10	1.71	.31	.05	.07	.52
IN.	1.97	3.00	6.14	2.46	.90	6.37	3.46	1.97	.35	.06	.08	.58

CAL YR 1977 TOTAL 87562.9 MEAN 240 MAX 3970 MIN 5.6 CFSM 2.53 IN 34.32
WTR YR 1978 TOTAL 69724.1 MEAN 191 MAX 2600 MIN 2.2 CFSM 2.01 IN 27.33

04215500 CAZENOVIA CREEK AT EBENEZER, NY

LOCATION.--Lat 42°49'47", long 78°46'33", Erie County, Hydrologic Unit 04120103, on right bank 30 ft (9 m) upstream from bridge on Ridge Road in Ebenezer, 4.4 mi (7.1 km) upstream from mouth, and 5 mi (8 km) southeast of Buffalo.

DRAINAGE AREA.--134 mi^2 (347 km^2).

PERIOD OF RECORD.--June 1940 to current year.

REVISED RECORDS.--WSP 1912: Drainage area. WRD NY 1973: 1972 (M).

GAGE.--Water-stage recorder. Datum of gage is 604.86 ft (184.361 m) National Geodetic Vertical Datum of 1929. Prior to Apr. 4, 1955, at datum 2.00 ft (0.610 m) higher. Apr. 4 to Oct. 12, 1955, nonrecording gage at temporary site 1.3 mi (2.1 km) downstream at different datum.

REMARKS.--Records fair except those for winter periods, which are poor.

AVERAGE DISCHARGE.--38 years, 228 ft^3/s (6.457 m^3/s), 23.11 in/yr (587 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,500 ft^3/s (382 m^3/s) Mar. 1, 1955, gage height, 15.82 ft (4.822 m) present datum, from rating curve extended above 7,700 ft^3/s (218 m^3/s); minimum, 2.6 ft^3/s (0.074 m^3/s) Nov. 7, 1953; minimum gage height, 1.87 ft (0.570 m) June 28, 1965.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,000 ft^3/s (113 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Dec. 14	--	5,600	159	a10.24	3.121	Mar. 21	1915	5,400	153	*a14.05	4.282
Dec. 18	2045	4,380	124	7.86	2.396	Apr. 5	0115	*8,010	227	10.66	3.249
Mar. 15	--	5,000	142	a9.40	2.865						

a Ice jam.

Minimum discharge, 12 ft^3/s (0.34 m^3/s) July 25, 26, gage height, 1.95 ft (0.594 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	794	100	1660	140	170	84	2380	95	53	20	18	15
2	888	100	490	130	160	82	1220	92	53	20	16	14
3	565	98	344	120	150	80	598	89	49	20	22	14
4	319	197	280	120	130	80	1360	82	47	21	40	15
5	218	506	250	130	120	78	3270	131	47	23	28	14
6	213	249	220	140	120	76	703	226	48	21	23	14
7	162	598	200	150	120	76	992	137	74	20	27	13
8	147	537	180	1500	120	78	659	118	205	19	25	22
9	459	235	170	520	110	80	365	169	189	19	23	22
10	408	736	150	330	110	84	329	201	89	20	21	19
11	209	800	140	250	110	92	543	127	65	18	19	16
12	244	448	150	210	110	110	648	106	51	18	18	84
13	185	398	300	160	110	300	375	127	63	16	17	100
14	144	349	3800	160	100	2500	282	714	61	16	16	33
15	134	375	2700	150	96	3800	218	610	47	15	18	42
16	127	1040	858	140	96	2300	193	240	41	15	18	127
17	124	1340	570	130	94	1500	177	1030	38	15	19	154
18	118	1970	2310	120	92	820	162	537	37	14	18	495
19	106	771	1750	120	90	420	147	277	41	14	30	967
20	109	490	659	110	90	520	193	209	51	14	70	226
21	100	986	506	110	90	3500	480	748	165	13	31	115
22	100	615	384	100	88	2160	398	286	177	14	20	72
23	100	359	319	96	88	2100	464	173	72	13	16	51
24	87	403	286	92	88	1190	254	134	46	13	16	39
25	79	300	834	98	86	610	185	106	35	12	15	33
26	77	286	350	300	86	521	151	89	31	13	16	28
27	103	254	250	450	86	753	131	79	30	27	15	25
28	118	231	200	310	84	708	118	72	28	34	15	26
29	112	222	170	260	---	829	109	67	26	32	15	24
30	109	240	160	220	---	549	103	59	24	23	16	22
31	103	---	150	190	---	731	---	57	---	24	15	---
TOTAL	6761	15233	20790	7076	2994	26810	17207	7187	1983	576	676	2841
MEAN	218	508	671	228	107	865	574	232	66.1	18.6	21.8	94.7
MAX	888	1970	3800	1500	170	3800	3270	1030	205	34	70	967
MIN	77	98	140	92	84	76	103	57	24	12	15	13
CFSM	1.63	3.79	5.01	1.70	.80	6.46	4.29	1.73	.49	.14	.16	.71
IN.	1.88	4.23	5.77	1.96	.83	7.44	4.78	2.00	.55	.16	.19	.79

CAL YR 1977 TOTAL 146889 MEAN 402 MAX 5940 MIN 17 CFSM 3.00 IN 40.78
WTR YR 1978 TOTAL 110134 MEAN 302 MAX 3800 MIN 12 CFSM 2.25 IN 30.57

04215900 LAKE ERIE AT BUFFALO, NY

LOCATION.--Lat 42°52'39", long 78°53'26", Erie County, Hydrologic Unit 04120200, near outer end of Buffalo River South Pier, at Buffalo.

DRAINAGE AREA.--263,700 mi² (683,000 km²).

PERIOD OF RECORD.--January 1860 to current year. Records prior to October 1960 in files of Lake Survey Center.

REVISED RECORDS.--WDR NY-75-1: 1974.

GAGE.--Water-stage recorder. Elevations are in feet International Great Lakes Datum (1955). Prior to Feb. 5, 1899, nonrecording gages.

COOPERATION.--Records furnished by U.S. Department of Commerce, NOAA-NOS, Lake Survey Center, Detroit, Mich.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 579.09 ft (176.507 m) Nov. 3, 1955; minimum 564.17 ft (171.959 m) Mar. 10, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 578.16 ft (176.223 m) Dec. 9; minimum elevation, 567.53 ft (172.983 m) Dec. 5.

ELEVATION, IN FEET ABOVE IGLD, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	571.26	571.00	573.14	571.15	571.23	570.99	572.21	572.28	572.28	571.88	571.69	571.30
2	571.54	570.91	573.85	572.66	571.17	570.93	571.67	572.31	572.38	571.80	571.69	571.37
3	571.73	570.91	571.23	572.37	571.18	570.94	571.38	572.22	572.23	571.74	571.89	571.56
4	571.78	570.82	571.19	571.80	571.13	571.02	571.89	571.51	572.23	571.94	571.70	571.27
5	572.07	570.05	569.23	571.20	571.12	570.94	572.05	572.00	572.45	572.01	571.67	571.43
6	571.67	570.66	571.52	570.83	571.20	570.91	571.68	572.26	572.17	572.00	571.64	571.62
7	571.03	570.48	571.89	570.97	571.24	570.88	572.23	572.09	572.21	572.02	571.52	571.35
8	571.46	570.84	570.94	571.33	571.12	570.84	572.04	572.07	572.42	572.26	572.15	571.16
9	572.34	570.90	575.65	573.45	571.11	570.88	571.87	572.52	572.53	572.09	572.10	571.00
10	571.66	571.97	571.38	574.10	571.12	570.89	571.80	572.39	572.20	572.14	571.67	571.09
11	571.98	572.98	571.15	572.96	571.14	570.85	572.33	572.16	572.29	572.03	571.69	571.46
12	572.32	571.14	571.54	571.68	571.14	570.89	572.28	572.16	572.42	571.89	571.60	570.79
13	571.20	571.00	571.05	570.90	571.00	570.83	572.44	572.04	572.53	572.00	571.61	570.26
14	571.20	571.03	571.02	570.63	571.07	571.00	572.23	572.16	572.43	571.96	571.57	571.18
15	571.55	571.34	571.23	571.67	571.02	571.04	572.21	571.98	572.20	571.95	571.58	571.57
16	571.24	571.22	570.91	571.45	571.01	571.00	572.07	572.06	572.11	571.87	571.95	571.35
17	571.67	571.69	570.44	570.50	571.04	571.11	572.02	572.31	572.23	571.86	572.14	570.92
18	571.48	572.47	570.95	571.08	571.02	571.12	571.75	572.29	572.31	571.84	571.56	570.97
19	571.16	571.29	571.20	571.02	571.01	571.24	571.96	572.35	572.15	571.84	571.82	571.07
20	571.32	570.80	571.19	570.31	570.97	571.05	572.28	572.36	572.09	571.84	571.53	571.22
21	571.35	571.58	571.84	571.28	571.00	571.37	572.38	572.42	572.25	571.84	571.48	571.36
22	571.25	570.92	572.76	571.42	571.06	571.41	572.24	572.28	572.28	571.92	571.55	571.08
23	570.48	571.03	572.04	571.20	570.97	571.49	572.13	572.28	572.20	572.16	571.52	571.03
24	571.07	571.49	571.40	571.14	570.99	571.23	572.22	572.31	572.04	571.66	571.70	571.36
25	571.05	571.01	573.73	571.04	570.98	570.72	572.01	572.33	572.03	571.79	571.43	571.05
26	571.05	572.13	572.45	572.62	571.01	571.35	571.96	572.30	572.17	571.90	571.45	571.11
27	571.15	570.96	572.02	573.21	570.95	571.80	572.22	572.27	572.31	572.08	571.21	571.37
28	570.93	572.01	572.19	571.92	570.92	571.89	572.29	572.22	572.32	571.87	571.76	571.02
29	570.68	570.87	571.91	571.34	---	571.86	572.26	572.21	572.28	572.13	571.74	570.90
30	570.44	570.70	571.52	571.35	---	571.78	572.23	572.29	572.06	571.48	571.48	571.22
31	570.88	---	571.04	571.23	---	571.65	---	572.40	---	571.70	571.21	---
MEAN	571.35	571.21	571.73	571.60	571.07	571.16	572.08	572.22	572.26	571.92	571.65	571.18
MAX	572.34	572.98	575.65	574.10	571.24	571.89	572.44	572.52	572.53	572.26	572.15	571.62
MIN	570.44	570.05	569.23	570.31	570.92	570.72	571.38	571.51	572.03	571.48	571.21	570.26

CAL YR 1977 MEAN 571.30 MAX 575.65 MIN 569.23
WTR YR 1978 MEAN 571.62 MAX 575.65 MIN 569.23

04216000 NIAGARA RIVER AT BUFFALO, NY

LOCATION.--Lat 42°52'40", long 78°53'25", Erie County, Hydrologic Unit 04120200, at head of Niagara River at Buffalo.

DRAINAGE AREA.--263,700 mi² (683,000 km²).

PERIOD OF RECORD.--January 1860 to September 1960 (monthly discharges only published in WSP 1912), October 1960 to current year. Records of January 1926 to September 1960 daily discharges available in files of U.S. Department of Commerce and U.S. Geological Survey.

REVISED RECORDS.--WSP 1912: 1862(M), 1955 (M), 1936(M). WDR NY 77-1: Drainage area.

GAGE.--Discharge determined from several powerplants at Niagara Falls and discharge over the falls. Discharge before 1926 determined from records of Corps of Engineers gages at Buffalo and Cleveland.

REMARKS.--Records do not include water diverted from Lake Michigan by Illinois and Michigan Canal during period of its operation prior to 1910 and by Chicago Sanitary and Ship Canal, which began operation in 1900, and from Lake Erie by Welland and New York State Canals before 1918. Records include water diverted into Lake Superior from Hudson Bay drainage by the Long Lake project, which began operation in July 1939, and by the Ogoki project, which began operation in July 1943. Figures of monthly mean discharge for 1860 to 1960 and daily discharge for 1961 to 1965, published in WSP 1912, are the official records of the U.S. Lake Survey, and have been coordinated with and concurred by the counterpart Canadian agencies, as have been the extremes for period of record through December 1976 and records October 1977 to current year.

COOPERATION.--Records of daily discharge furnished by Detroit District Corps of Engineers and Canada Department of the Environment.

AVERAGE DISCHARGE.--118 years, 204,000 ft³/s (5,777 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 299,000 ft³/s (8,470 m³/s) Nov. 17, 1955; minimum daily, 90,000 ft³/s (2,550 m³/s) Jan. 13, 1964. Maximum monthly mean discharge, 264,700 ft³/s (7,500 m³/s) May 1974 (revised); minimum monthly mean, 116,200 ft³/s (3,290 m³/s) February 1936.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 276,000 ft³/s (7,816 m³/s) Jan. 10; minimum daily discharge, 173,000 ft³/s (4,899 m³/s) Jan. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	219000	207000	232000	210000	192000	203000	244000	222000	240000	227000	220000	212000
2	225000	205000	258000	238000	201000	202000	224000	230000	243000	223000	219000	215000
3	229000	205000	224000	226000	208000	203000	219000	221000	240000	221000	225000	218000
4	232000	204000	216000	200000	206000	206000	231000	211000	238000	226000	221000	212000
5	238000	187000	175000	210000	206000	204000	235000	217000	244000	228000	220000	216000
6	228000	198000	211000	204000	208000	206000	225000	226000	238000	227000	219000	219000
7	214000	198000	228000	201000	212000	205000	239000	227000	240000	228000	217000	216000
8	220000	205000	210000	217000	209000	201000	233000	226000	243000	232000	229000	210000
9	238000	207000	270000	252000	208000	202000	230000	233000	246000	221000	231000	207000
10	231000	227000	226000	276000	208000	202000	227000	225000	239000	228000	222000	207000
11	231000	257000	213000	220000	209000	202000	236000	231000	240000	223000	220000	216000
12	242000	222000	219000	200000	211000	202000	234000	239000	242000	222000	220000	204000
13	219000	211000	212000	181000	206000	200000	240000	236000	245000	224000	220000	190000
14	214000	211000	214000	178000	203000	205000	222000	237000	240000	223000	219000	207000
15	221000	217000	225000	199000	208000	209000	226000	234000	238000	222000	219000	222000
16	216000	220000	220000	195000	210000	208000	226000	234000	234000	221000	225000	213000
17	222000	226000	206000	182000	208000	212000	229000	240000	236000	219000	232000	207000
18	220000	244000	198000	186000	208000	214000	221000	242000	241000	221000	218000	204000
19	214000	226000	208000	191000	209000	215000	221000	242000	236000	219000	225000	210000
20	215000	206000	224000	173000	208000	212000	232000	244000	234000	219000	218000	210000
21	218000	223000	233000	193000	210000	224000	240000	245000	236000	220000	211000	216000
22	215000	211000	255000	198000	210000	232000	237000	243000	238000	221000	217000	209000
23	198000	205000	237000	190000	206000	233000	233000	240000	224000	226000	217000	208000
24	209000	224000	226000	191000	212000	228000	235000	240000	227000	216000	222000	214000
25	210000	209000	253000	203000	210000	211000	231000	240000	224000	218000	216000	209000
26	210000	232000	246000	236000	209000	221000	229000	240000	228000	222000	215000	208000
27	212000	212000	235000	250000	205000	229000	234000	239000	230000	227000	210000	215000
28	208000	230000	235000	218000	206000	230000	235000	238000	226000	221000	223000	207000
29	203000	211000	230000	206000	---	229000	235000	239000	236000	228000	224000	204000
30	198000	204000	222000	208000	---	228000	230000	239000	230000	213000	216000	211000
31	204000	---	214000	203000	---	225000	---	244000	---	218000	219000	---
TOTAL	6773000	6444000	6975000	6435000	5806000	6603000	6933000	7264000	7096000	6904000	6829000	6316000
MEAN	218500	214800	225000	207600	207400	213000	231100	234300	236500	222700	220300	210500
MAX	242000	257000	270000	276000	212000	233000	244000	245000	246000	232000	232000	222000
MIN	198000	187000	175000	173000	192000	200000	219000	211000	224000	213000	210000	190000

CAL YR 1977 TOTAL 78205000 MEAN 214300 MAX 270000 MIN 175000
WTR YR 1978 TOTAL 80378000 MEAN 220200 MAX 276000 MIN 173000

04216200 SCAJAQUADA CREEK AT BUFFALO, NY

LOCATION.--Lat 42°54'41", long 78°47'48", Erie County, Hydrologic Unit 04120103, on right bank 58 ft (18 m) upstream from point where stream goes underground in concrete-lined tunnel, 86 ft (26 m) upstream from Pine Ridge Road, and 0.2 mi (0.3 km) east of boundary line of city of Buffalo.

DRAINAGE AREA.--15.9 mi^2 (41.2 km^2).

PERIOD OF RECORD.--Feburary 1957 to current year.

REVISED RECORDS.--WSP 1912: Drainage area. WRD NY 1974: 1973.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 626.26 ft (190.884 m) National Geodetic Vertical Datum of 1929 (city of Buffalo bench mark).

REMARKS.--Records good. Discharge includes flow diverted from Lake Erie and Niagara River as sewage-plant effluent entering basin upstream from station.

COOPERATION.--Town of Cheektowaga maintains records of sewage-plant discharge.

AVERAGE DISCHARGE.--21 years, 34.9 ft^3/s (0.988 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,620 ft^3/s (74.2 m^3/s) Aug. 7, 1963, gage height, 14.38 ft (4.383 m); minimum, 3.9 ft^3/s (0.11 m^3/s) Aug. 24, 1978, gage height, 1.46 ft (0.445 m) result of channel improvement project upstream.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 600 ft^3/s (17 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Dec. 14	1200	724	20.5	5.70	1.737	Mar. 14	1530	733	20.8	5.74	1.750
Dec. 18	1815	639	18.1	5.27	1.606	Mar. 21	1630	668	18.9	5.42	1.652
Dec. 25	0345	664	18.8	5.40	1.646	May 17	2030	*1,820	51.5	*10.82	3.298

Minimum discharge, 3.9 ft^3/s (0.11 m^3/s) Aug. 24, gage height, 1.46 ft (0.445 m) result of channel improvement project upstream.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	216	16	276	22	21	17	46	16	16	14	15	15
2	138	17	70	21	20	16	29	16	16	13	15	15
3	65	17	62	22	19	17	25	16	15	14	94	25
4	35	39	38	21	18	16	113	15	14	18	22	16
5	26	26	25	22	17	16	134	49	17	14	14	16
6	22	20	24	22	17	16	45	24	17	15	13	16
7	20	167	25	22	17	16	72	17	130	15	13	16
8	37	85	27	241	17	19	31	16	107	15	15	49
9	123	34	26	164	17	23	22	30	27	14	15	16
10	41	155	28	51	17	32	21	20	18	14	15	13
11	28	181	28	35	17	31	37	16	16	15	15	13
12	157	74	28	26	16	37	31	16	17	15	15	141
13	59	47	55	22	17	73	22	27	21	15	15	22
14	30	36	558	20	16	396	20	205	16	15	12	18
15	24	35	325	18	16	204	17	65	15	15	9.4	45
16	30	60	129	19	16	115	16	31	16	14	10	75
17	24	256	84	18	16	92	16	468	26	13	11	65
18	21	136	327	18	16	72	16	203	19	13	11	126
19	19	47	184	19	15	102	25	42	17	13	52	72
20	18	30	82	18	16	110	62	44	16	13	44	26
21	18	50	79	19	16	436	139	86	44	13	18	22
22	21	35	44	18	15	205	47	30	19	13	16	20
23	17	40	38	18	15	226	26	23	16	13	16	18
24	18	57	45	20	15	66	22	21	15	13	49	16
25	17	31	272	42	16	34	20	20	14	13	28	17
26	17	29	44	122	16	34	18	19	16	15	17	16
27	17	23	26	49	16	57	18	18	16	26	14	16
28	17	23	25	41	17	47	16	16	15	18	21	24
29	16	29	23	32	---	41	16	17	15	16	17	16
30	15	58	23	27	---	31	15	17	16	14	16	15
31	17	---	24	23	---	31	---	17	---	15	15	---
TOTAL	1323	1853	3044	1232	469	2628	1137	1620	742	456	652.4	980
MEAN	42.7	61.8	98.2	39.7	16.8	84.8	37.9	52.3	24.7	14.7	21.0	32.7
MAX	216	256	558	241	21	436	139	468	130	26	94	141
MIN	15	16	23	18	15	16	15	15	14	13	9.4	13

CAL YR 1977 TOTAL 20765.0 MEAN 56.9 MAX 676 MIN 12
WTR YR 1978 TOTAL 16136.4 MEAN 44.2 MAX 558 MIN 9.4

04216418 TONAWANDA CREEK AT ATTICA, NY

LOCATION.--Lat 42°51'50", long 78°17'02", Wyoming County, Hydrologic Unit 04120104, on right bank behind Village Hall and fire station, 150 ft (46 m) downstream from bridge on State Highway 238 (Main Street) at Attica, and 0.4 mi (0.6 km) upstream from Tannery Creek.

DRAINAGE AREA.--77.1 mi² (200 km²).

PERIOD OF RECORD.--October 1977 to September 1978.

GAGE.--Water-stage recorder and concrete weir. Altitude of gage is 960 ft (293 m), from topographic map.

REMARKS.--Records good except those for winter periods and those for period of no gage height record, Oct. 1 to Nov. 22, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,360 ft³/s (152 m³/s) Apr. 5, 1978, gage height, 8.82 ft (2.688 m), minimum, 9.2 ft³/s (0.26 m³/s) Sept. 2, 3, 7, 8, 1978, gage height, 3.38 ft (1.030 m).

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge, about 6,000 ft³/s (170 m³/s) June 23, 1972, gage height about 12.0 ft (3.66 m) present site and datum, from information supplied by Village of Attica.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,200 ft³/s (34.0 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 14	1600	2,700	76.5	7.09	2.161	Mar. 23	1900	1,380	39.1	5.90	1.798
Dec. 18	2115	2,390	67.7	6.84	2.085	Apr. 1	1615	2,540	71.9	6.96	2.121
Jan. 9	0030	2,060	58.3	6.56	1.999	Apr. 5	0030	*5,360	152	*8.82	2.688
Mar. 21	1900	2,120	60.0	6.61	2.015	May 17	0600	1,510	42.8	6.03	1.838

Minimum discharge, 9.2 ft³/s (0.26 m³/s) Sept. 2, 3, 7, 8, gage height, 3.38 ft (1.030 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	480	58	647	120	120	52	1660	78	40	18	15	10
2	620	58	225	110	110	50	653	78	36	17	15	9.2
3	490	62	174	86	100	49	317	76	36	17	34	9.2
4	300	160	156	92	96	48	1110	67	34	23	32	11
5	250	140	118	98	92	47	1610	84	34	21	18	10
6	180	130	120	98	90	46	416	120	34	18	28	10
7	150	450	140	100	88	45	672	87	34	17	21	9.2
8	180	300	120	550	86	46	375	78	66	15	20	10
9	300	190	110	817	82	48	229	87	49	17	18	11
10	190	490	100	240	80	54	229	85	34	17	17	10
11	170	380	98	190	78	60	360	66	30	15	15	10
12	160	270	100	160	76	68	351	59	26	14	14	44
13	140	230	130	130	74	84	254	57	28	14	13	30
14	120	210	1500	110	70	294	205	411	32	14	11	15
15	110	330	1200	98	68	889	163	223	25	13	13	14
16	120	330	416	92	68	435	149	127	25	14	14	47
17	160	500	285	96	66	267	138	653	26	14	15	36
18	140	660	1140	84	64	182	130	339	44	13	14	106
19	130	380	786	78	62	177	128	173	36	11	13	233
20	120	270	352	76	62	167	205	123	34	11	32	58
21	100	370	303	74	60	966	295	265	242	11	20	34
22	100	269	242	72	58	997	290	137	128	13	14	26
23	94	189	209	70	58	1100	250	102	54	11	13	23
24	86	185	197	68	58	578	170	87	36	11	13	20
25	82	159	411	72	56	285	138	76	30	13	14	21
26	76	145	210	200	56	250	120	70	28	13	13	20
27	72	135	170	240	54	346	111	62	25	34	11	21
28	68	131	150	200	54	351	93	57	23	38	11	20
29	64	125	130	160	---	370	90	52	21	23	13	21
30	62	152	130	140	---	281	84	49	20	20	11	20
31	60	---	120	130	---	395	---	47	---	17	13	---
TOTAL	5374	7458	10189	4851	2086	9027	10995	4075	1312	517	518	918.6
MEAN	173	249	329	156	74.5	291	367	131	43.7	16.7	16.7	30.6
MAX	620	660	1500	817	120	1100	1660	653	242	38	34	233
MIN	60	58	98	68	54	45	84	47	20	11	11	9.2
CFSM	2.24	3.23	4.27	2.02	.97	3.77	4.76	1.70	.57	.22	.22	.40
IN.	2.59	3.60	4.92	2.34	1.01	4.36	5.30	1.97	.63	.25	.25	.44

WTR YR 1978 TOTAL 57320.6 MEAN 157 MAX 1660 MIN 9.2 CFSM 2.04 IN 27.66

04216500 LITTLE TONAWANDA CREEK AT LINDEN, NY

LOCATION.--Lat 42°52'37", long 78°09'48", Genesee County, Hydrologic Unit 04120104, on right bank at upstream side of bridge on County Highway 13A (Depot Road) in Linden and 7 mi (11 km) upstream from mouth.

DRAINAGE AREA.--22.1 mi² (57.2 km²).

PERIOD OF RECORD.--July 1912 to September 1968, October 1977 to September 1978.

GAGE.--Water-stage recorder . Concrete control since Oct. 15, 1930. Datum of gage is 1,081.62 ft (329.678 m) National Geodetic Vertical Datum of 1929. Prior to Aug. 26, 1943, nonrecording gage at same site and datum.

REMARKS.--Records good, except those for winter periods and those for periods of no gage-height record, Oct. 1 to Nov. 16 and Aug. 30 to Sept. 12, which are poor.

AVERAGE DISCHARGE.--56 years (1912-19, 1920-68, 1978), 27.1 ft³/s (0.767 m³/s), 16.65 in/yr (423 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,700 ft³/s (76.5 m³/s) Mar. 7, 1956, gage height, 16.04 ft (4.889 m), from high-water mark; minimum, 0.08 ft³/s (0.002 m³/s) Aug. 3, 4, 1955; minimum gage height, -0.14 ft (-0.043 m) Jan. 17, 1966 (siphonic action).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 530 ft³/s (15.0 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 15	0115	633	17.9	5.98	1.823	Apr. 1	1615	920	26.1	7.44	2.268
Dec. 18	2300	743	21.0	6.55	1.996	Apr. 5	0100	*1,140	32.3	*8.46	2.579
Mar. 22	0030	631	17.9	5.97	1.820						

Minimum daily discharge, 0.40 ft³/s (0.011 m³/s) Sept. 6, 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	110	12	179	30	41	17	569	16	7.0	2.6	.83	.52
2	150	12	68	27	38	16	238	16	6.6	2.5	.97	.60
3	120	13	48	23	34	16	106	15	6.1	2.5	2.2	.58
4	74	38	42	24	32	16	205	14	5.9	3.1	2.0	.54
5	60	33	30	25	31	15	490	25	5.9	3.1	1.1	.50
6	42	30	31	26	30	15	133	33	5.9	2.5	.97	.40
7	35	110	29	27	29	15	218	21	6.6	2.1	1.0	.40
8	44	70	27	116	28	15	127	18	13	1.9	1.1	.52
9	70	45	26	231	27	16	67	27	8.0	1.9	.97	.70
10	45	120	25	62	26	18	60	25	6.1	1.8	.76	.60
11	42	90	24	63	25	20	98	19	4.9	1.4	.63	.50
12	38	64	25	52	25	22	116	16	4.2	1.3	.63	2.0
13	32	56	34	42	24	30	72	21	4.6	1.2	.63	.97
14	28	50	257	36	23	50	56	92	4.4	1.0	.63	.76
15	25	80	421	33	23	163	41	75	3.9	1.2	.70	.76
16	28	84	152	30	22	124	36	37	3.6	1.3	.76	3.1
17	40	122	95	28	22	79	31	183	3.7	1.3	.70	2.0
18	36	164	308	27	21	57	28	176	11	.97	.57	8.0
19	32	94	328	26	21	52	31	55	5.9	.97	.63	43
20	28	58	126	25	20	50	48	36	4.9	.83	.83	8.0
21	25	58	98	24	20	233	80	64	46	.90	.70	3.9
22	25	53	74	23	19	408	69	35	49	1.0	.57	2.7
23	23	41	63	23	19	426	62	26	14	.83	.51	2.5
24	21	39	57	24	19	235	39	21	8.0	.76	.63	2.3
25	20	34	115	31	18	115	30	18	5.9	.70	.83	2.1
26	18	32	71	63	18	95	27	15	4.8	.83	.63	1.9
27	17	26	52	71	17	130	25	13	4.6	2.0	.51	1.9
28	16	25	42	61	17	129	23	11	4.2	1.2	.51	1.8
29	15	26	36	54	---	150	20	10	3.6	.83	.57	1.7
30	14	31	34	48	---	104	17	8.7	3.1	1.3	.70	1.8
31	13	---	32	45	---	138	---	7.7	---	.90	.45	---
TOTAL	1286	1710	2949	1420	689	2969	3162	1149.4	265.4	46.72	25.22	97.05
MEAN	41.5	57.0	95.1	45.8	24.6	95.8	105	37.1	8.85	1.51	.81	3.24
MAX	150	164	421	231	41	426	569	183	49	3.1	2.2	43
MIN	13	12	24	23	17	15	17	7.7	3.1	.70	.45	.40
CFSM	.19	.26	.43	.21	.11	.43	.48	.17	.04	.007	.004	.02
IN.	.22	.29	.50	.24	.12	.50	.53	.19	.04	.01	.00	.02

WTR YR 1978 TOTAL 15768.79 MEAN 43.2 MAX 569 MIN .40 CFSM .20 IN 2.65

04217000 TONAWANDA CREEK AT BATAVIA, NY
(National stream-quality accounting network station)

LOCATION.--Lat 42°59'51", long 78°11'20", Genesee County, Hydrologic Unit 04120104, on right bank 150 ft (46 m) downstream from municipal dam, 500 ft (152 m) upstream from bridge on Walnut Street in Batavia, and 5.0 mi (8.0 km) downstream from Little Tonawanda Creek. Water-quality sampling site at discharge station.

DRAINAGE AREA.--171 mi² (443 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1944 to current year.

REVISED RECORDS.--WSP 1627: 1956-57. WSP 1912: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 876.33 ft (267.105 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair. Diversion upstream from station by city of Batavia for municipal supply; sewage, which may include water from municipal and industrial wells upstream from gage, enters creek downstream from gage.

COOPERATION.--City of Batavia maintains records of diversion.

AVERAGE DISCHARGE.--34 years, 207 ft³/s (5.862 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,200 ft³/s (204 m³/s) Mar. 31, 1960, gage height, 12.70 ft (3.871 m); maximum gage height, 13.85 ft (4.221 m) Apr. 6, 1947; minimum discharge, 0.4 ft³/s (0.011 m³/s) Aug. 5-7, 1955; minimum gage height, 0.59 ft (0.180 m) July 26, 27, 1948.

EXTREMES OUTSIDE PERIOD OF RECORD.--From records of city of Batavia, maximum stage, 14.5 ft (4.42 m) in March 1942.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,800 ft³/s (51 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 15	2230	*4,120	117	*9.56	2.914	Apr. 2	0930	3,140	88.9	8.07	2.460
Dec. 19	1530	3,640	103	8.86	2.701	Apr. 5	1700	3,800	108	9.10	2.774
Mar. 22	2000	3,620	103	8.84	2.694						

Minimum discharge, 10 ft³/s (0.28 m³/s) Sept. 8, 12, gage height, 1.34 ft (0.408 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	484	110	632	230	290	120	1070	142	69	34	22	11
2	889	105	920	220	270	110	2650	138	65	32	22	15
3	1080	105	464	190	250	110	1120	132	60	32	25	16
4	833	112	361	160	230	110	648	123	57	36	69	15
5	459	294	265	180	210	110	2540	126	53	40	37	15
6	361	240	190	190	200	100	1810	223	53	35	28	13
7	320	227	240	200	200	100	1030	178	57	30	37	11
8	273	738	230	280	190	100	1120	151	100	28	28	11
9	315	539	210	780	180	110	627	151	97	28	24	16
10	539	338	200	1140	180	120	464	189	69	27	23	19
11	338	802	190	653	180	130	469	148	58	25	21	12
12	289	714	190	484	180	142	668	123	49	23	18	30
13	285	489	250	380	170	142	539	129	45	22	16	62
14	236	416	469	310	160	193	421	231	53	21	14	35
15	215	384	2410	260	160	544	338	627	49	21	14	28
16	204	597	3020	230	150	994	294	311	45	20	18	41
17	212	592	1360	210	150	1130	273	534	42	21	17	88
18	285	884	858	200	150	828	244	905	64	19	16	65
19	236	1120	2840	190	140	587	236	504	67	19	18	208
20	236	674	1750	180	140	563	265	277	60	16	24	186
21	212	504	879	170	140	684	553	388	55	12	37	97
22	178	592	642	170	130	2710	494	338	365	16	23	64
23	182	402	484	160	130	2970	544	215	129	17	16	52
24	165	351	449	160	130	2480	365	178	77	15	13	42
25	151	324	602	170	130	1210	281	154	60	13	16	39
26	145	289	632	240	120	695	231	132	51	14	20	36
27	135	240	420	460	120	802	208	118	46	29	18	34
28	129	230	330	504	120	817	189	105	41	49	14	32
29	121	220	270	430	---	905	171	95	39	40	16	32
30	115	240	250	360	---	719	154	83	36	33	16	30
31	115	---	240	310	---	700	---	75	---	27	14	---
TOTAL	9737	12872	22247	9801	4800	21035	20016	7223	2111	794	694	1355
MEAN	314	429	718	316	171	679	667	233	70.4	25.6	22.4	45.2
MAX	1080	1120	3020	1140	290	2970	2650	905	365	49	69	208
MIN	115	105	190	160	120	100	154	75	36	12	13	11

CAL YR 1977 TOTAL 135461 MEAN 371 MAX 3690 MIN 17
WTR YR 1978 TOTAL 112685 MEAN 309 MAX 3020 MIN 11

04217000 TONAWANDA CREEK AT BATAVIA, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1971, and current year.
CHEMICAL DATA: 1971 (a), 1978 (c).
MINOR ELEMENTS DATA: 1978 (b).
ORGANIC DATA: TOC--1978 (b).
NUTRIENT DATA: 1971 (a), 1978 (c).
BIOLOGICAL DATA:
Coliform bacteria--1978 (c).
Phytoplankton--1978 (c).
SEDIMENT DATA: 1978 (c).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: January to September 1978.
WATER TEMPERATURES: January to September 1978.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum daily, 850 micromhos Mar. 14; minimum daily, 203 micromhos Apr. 2.
WATER TEMPERATURES: Maximum daily, 26.0°C July 24; minimum daily, freezing point on many days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	PH (UNITS)	TUR-BID-ITY (JTU)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
JAN 18...	1000	215	7.1	4	--	12.8	89	740	510	200	43	60
FEB 15...	0900	160	7.0	5	--	12.8	88	510	380	210	41	64
MAR 15...	0900	544	7.2	65	--	13.0	90	5500	670	140	31	42
APR 13...	1100	555	7.2	45	--	10.4	90	265	1900	130	20	39
MAY 12...	1200	122	7.4	5	--	10.2	100	21	35	190	30	53
JUN 07...	0930	52	7.5	4	--	8.6	92	640	42	230	40	67
JUL 14...	1000	21	7.7	--	3.0	7.8	93	64	68	240	41	70
AUG 01...	1200	21	7.2	--	3.0	7.5	88	K74	31	210	48	62
SEP 07...	1100	11	7.7	--	2.0	8.2	91	K12	37	220	41	62

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)
JAN 18...	12	12	1.8	190	0	160	31	20	.1	6.1	247
FEB 15...	13	12	1.7	210	0	170	32	20	.0	5.9	263
MAR 15...	7.9	27	3.0	130	0	110	24	44	.0	3.7	230
APR 13...	7.2	7.4	1.6	130	0	110	21	12	.1	3.1	167
MAY 12...	13	10	1.7	190	0	160	28	17	.1	1.4	251
JUN 07...	15	12	2.2	230	0	190	34	20	.1	2.8	294
JUL 14...	16	14	2.6	--	--	200	32	25	.1	2.2	317
AUG 01...	13	16	3.0	--	--	160	53	26	.1	4.1	296
SEP 07...	16	16	3.0	--	--	180	40	26	.1	3.8	314

K Results based on colony count outside the acceptable range (non-ideal colony count).

04217000 TONAWANDA CREEK AT BATAVIA, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)
JAN 18...	237	1.2	.08	.25	.33	.34	1.5	.02	.01	--	--
FEB 15...	252	1.1	.10	.36	.46	.41	1.6	.03	.00	--	--
MAR 15...	216	1.5	.31	.99	1.3	.76	2.8	.12	.03	0	0
APR 13...	155	.61	.03	.39	.42	.10	1.0	.06	.00	--	--
MAY 12...	218	.34	.00	.33	.33	.23	.67	.02	.00	1	1
JUN 07...	266	.74	.07	.46	.53	.45	1.3	.06	.01	--	--
JUL 14...	282	.43	.04	.34	.38	.14	.81	.03	.00	2	1
AUG 01...	273	.56	.08	.48	.56	.51	1.1	.09	.06	--	--
SEP 07...	275	.36	.01	.30	.31	.19	.67	.05	.03	2	2

DATE	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	BARIUM, DISSOLVED (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)
JAN 18...	--	--	--	--	--	--	--	--	--	--	--
FEB 15...	--	--	--	--	--	--	--	--	--	--	--
MAR 15...	0	0	0	1	<10	2	1	0	5	3	4300
APR 13...	--	--	--	--	--	--	--	--	--	--	--
MAY 12...	0	0	0	0	10	0	0	0	2	2	370
JUN 07...	--	--	--	--	--	--	--	--	--	--	--
JUL 14...	0	--	0	0	10	1	0	0	4	2	310
AUG 01...	--	--	--	--	--	--	--	--	--	--	--
SEP 07...	100	100	1	0	10	1	1	1	4	1	200

DATE	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	SILVER, DISSOLVED (UG/L AS AG)
JAN 18...	--	--	--	--	--	--	--	--	--	--	--
FEB 15...	--	--	--	--	--	--	--	--	--	--	--
MAR 15...	50	5	1	210	130	<.5	<.5	0	0	0	0
APR 13...	--	--	--	--	--	--	--	--	--	--	--
MAY 12...	40	5	3	70	40	<.5	<.5	0	0	0	0
JUN 07...	--	--	--	--	--	--	--	--	--	--	--
JUL 14...	30	2	2	110	40	.5	.5	0	0	0	0
AUG 01...	--	--	--	--	--	--	--	--	--	--	--
SEP 07...	30	6	2	40	30	<.5	<.5	0	0	0	0

04217000 TONAWANDA CREEK AT BATAVIA, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C)
JAN					
18...	--	--	6.9	--	--
MAR					
15...	20	0	--	15	--
APR					
13...	--	--	7.0	--	--
MAY					
12...	10	0	--	9.1	1.1
JUN					
07...	--	--	5.4	--	--
JUL					
14...	30	0	--	2.2	.4
AUG					
01...	--	--	11	--	--
SEP					
07...	20	0	--	4.1	1.3

DATE	TIME	SAMP- LING DEPTH (FT)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
JAN					
18...	0735	1.0	6.0	480	.5
18...	0740	1.2	18	475	.0
18...	0745	1.2	30	480	.0
18...	0750	1.4	42	485	.0
18...	0755	1.3	54	480	.5
18...	0800	1.0	66	475	.5
FEB					
15...	0910	1.0	7.0	460	.0
15...	0915	1.0	17	465	.0
15...	0920	1.0	27	470	.0
15...	0925	1.0	37	460	.0
15...	0930	1.0	47	460	.0
15...	0935	1.0	57	460	.0
MAR					
15...	0920	1.0	6.0	440	1.0
15...	0925	1.0	18	445	1.0
15...	0930	1.5	30	445	1.5
15...	0935	1.5	42	440	1.5
15...	0940	1.5	54	450	1.0
15...	0945	1.0	66	440	1.0

DATE	TIME	SAMP- LING DEPTH (FT)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
APR					
13...	0900	1.0	6.0	305	9.0
13...	0905	1.0	18	310	9.5
13...	0910	1.5	30	315	9.0
13...	0915	1.5	42	310	9.0
13...	0920	1.5	54	310	9.0
13...	0925	1.0	66	315	9.5
MAY					
12...	0915	1.0	6.0	410	14.0
12...	0920	1.0	18	415	14.5
12...	0925	1.0	30	415	14.5
12...	0930	1.0	42	420	14.0
12...	0935	1.0	54	415	14.0
12...	0940	1.0	66	410	14.5
JUN					
07...	0910	1.0	6.0	490	17.5
07...	0915	1.0	18	495	18.0
07...	0920	1.0	30	500	17.0
07...	0925	1.0	42	490	17.5
07...	0930	1.0	54	490	17.5

DATE	TIME	SAMP- LING DEPTH (FT)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
JUN					
07...	0935	1.0	66	490	18.0
JUL					
14...	1015	1.0	4.0	510	23.0
14...	1020	1.0	12	515	23.5
14...	1025	1.0	20	520	23.5
14...	1030	1.0	28	510	23.0
14...	1035	1.0	36	515	23.0
14...	1040	1.0	44	510	23.0
AUG					
01...	1205	1.0	5.0	490	22.5
01...	1210	1.0	15	485	22.0
01...	1215	1.0	25	495	22.5

DATE	TIME	SAMP- LING DEPTH (FT)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
AUG					
01...	1220	1.0	35	490	23.0
01...	1225	1.0	45	490	22.5
01...	1230	1.0	55	490	22.5
SEP					
07...	0935	1.0	3.0	505	20.0
07...	0940	1.0	11	500	20.5
07...	0945	1.0	19	500	20.0
07...	0950	1.0	27	495	20.0
07...	0955	1.0	35	505	20.5
07...	1000	1.0	43	510	20.0

04217000 TONAWANDA CREEK AT BATAVIA, NY--Continued

SUSPENDED-SEDIMENT MEASUREMENTS, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
FEB 15...	0900	160	13	5.6	JUN 07...	0930	52	15	2.1
MAR 15...	0900	544	139	204	JUL 14...	1000	21	9	.51
APR 13...	1100	555	76	114	AUG 01...	1200	21	5	.28
MAY 12...	1200	122	5	1.6	SEP 07...	1100	11	3	.09

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

PHYTOPLANKTON

DATE TIME	MAR 15,78 0900	MAY 12,78 1200	JUN 7,78 0930
TOTAL CELLS/ML	3200	860	780
DIVERSITY: DIVISION	0.7	0.8	1.5
.CLASS	0.7	0.8	1.8
..ORDER	0.7	1.3	2.2
...FAMILY	1.1	1.9	2.3
....GENUS	1.1	1.9	2.3

ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CHLOROPHYTA (GREEN ALGAE)						
.CHLOROPHYCEAE						
..CHLOROCOCCALES						
...OOCYSTACEAE						
....ANKISTRODESMUS	35	1	--	-	22	3
..VOLVOCALES						
...CHLAMYDOMONADACEAE						
....CHLAMYDOMONAS	--	-	76	9	340#	43
CHRYSOPHYTA						
.BACILLARIOPHYCEAE						
..CENTRALES						
...COSCINODISCACEAE						
....CYCLOTELLA	--	-	95	11	67	9
..PENNALES						
...CYMBELLACEAE						
....AMPHORA	35	1	--	-	--	-
....CYMBELLA	35	1	--	-	--	-
...DIATOMACEAE						
....DIATOMA	35	1	--	-	--	-
...FRAGILARIACEAE						
....SYNEDRA	71	2	--	-	--	-
...GOMPHONEMATACEAE						
....GOMPHONEMA	71	2	57	7	22	3
...NAVICULACEAE						
....NAVICULA	210	7	530#	62	110	14
...NITZSCHIACEAE						
....NITZSCHIA	71	2	38	4	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)						
.CYANOPHYCEAE						
..HORMOGONALES						
...OSCILLATORIACEAE						
....OSCILLATORIA	2600#	82	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)						
.CRYPTOPHYCEAE						
..CRYPTOMONIDALES						
...CRYPTOMONODACEAE						
....CRYPTOMONAS	--	-	38	4	89	11
.EUGLENOPHYCEAE						
..EUGLENALES						
...EUGLENACEAE						
....TRACHELOMONAS	--	-	19	2	130#	17

NOTE: # - DOMINANT ORGANISM: EQUAL TO OR GREATER THAN 15%

04217000 TONAWANDA CREEK AT BATAVIA, NY--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1				---	425	480	280	430	460	515	490	520
2				---	435	475	203	430	485	503	480	520
3				---	440	470	237	460	490	530	498	520
4				---	445	480	300	430	490	520	560	510
5				---	445	465	256	460	485	560	500	545
6				---	465	490	230	440	500	715	482	500
7				---	475	470	254	390	500	518	490	515
8				---	460	470	250	410	560	520	485	500
9				---	455	475	288	415	499	558	480	520
10				---	470	480	364	425	460	515	505	522
11				---	465	480	355	395	482	518	499	510
12				---	460	480	273	410	480	530	485	539
13				---	430	490	286	420	540	530	480	520
14				---	455	850	316	420	500	535	485	510
15				---	460	430	320	280	510	525	495	580
16				---	445	300	360	330	500	522	500	518
17				---	445	310	385	365	505	542	505	445
18				---	450	358	385	285	499	700	500	535
19				450	470	364	390	335	505	540	505	482
20				435	455	390	410	345	539	560	505	378
21				440	460	420	385	375	475	540	558	440
22				450	475	254	340	320	400	540	550	485
23				440	460	242	310	365	315	540	495	520
24				450	465	240	330	395	370	605	500	522
25				465	475	276	385	445	400	550	500	543
26				560	465	352	425	420	428	550	505	555
27				445	485	348	415	425	445	518	520	560
28				330	475	330	400	430	478	565	495	575
29				355	---	353	405	440	480	542	499	580
30				390	---	338	420	460	500	505	520	570
31				405	---	306	---	475	---	575	510	---
MEAN				433	458	409	332	401	476	548	503	518

WTR YR 1978 MEAN 454 MAX 850 MIN 203

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1				---	.0	.0	5.0	10.0	22.0	21.5	22.0	21.0
2				---	.0	.0	2.0	8.0	22.0	22.0	20.0	20.0
3				---	.0	.0	3.0	8.0	21.5	20.0	22.0	20.0
4				---	.0	.0	2.0	10.0	20.0	20.0	20.5	20.0
5				---	.0	.0	7.0	10.5	19.0	19.0	21.0	19.5
6				---	.0	.0	3.0	9.0	17.0	24.0	22.0	20.0
7				---	.0	.0	5.0	9.0	18.0	19.0	21.5	20.5
8				---	.0	.0	7.0	11.0	18.0	22.0	21.0	20.0
9				---	.0	.0	2.0	11.0	18.5	23.0	21.0	20.0
10				---	.0	.0	5.0	11.0	18.5	23.0	21.0	18.0
11				---	.0	.0	8.0	11.0	19.0	22.0	21.0	19.0
12				---	.0	.0	7.5	13.0	20.0	22.0	22.0	18.0
13				---	.0	.0	9.0	14.0	19.0	25.0	22.0	17.0
14				---	.0	1.5	9.0	14.5	18.0	22.0	25.0	19.0
15				---	.0	.0	5.5	13.0	17.0	22.0	23.0	17.5
16				---	.0	.0	4.5	14.0	16.0	22.0	24.0	18.0
17				---	.0	.0	6.0	13.5	17.0	21.0	23.0	17.0
18				---	.0	.0	5.5	15.0	19.5	20.0	22.0	16.5
19				---	.0	.0	7.0	14.5	21.0	21.0	23.0	15.0
20				.0	.0	.0	8.5	16.5	21.0	23.0	22.0	16.0
21				.0	.0	.5	5.0	17.5	21.5	24.5	21.0	18.0
22				.0	.0	.5	3.0	15.0	20.0	24.5	21.0	19.0
23				.0	.0	.0	8.0	16.5	19.0	25.0	23.0	17.0
24				.0	.0	.0	8.0	17.5	19.0	26.0	23.0	17.0
25				.5	.0	1.0	10.0	19.5	19.0	23.0	21.0	17.0
26				.5	.0	1.0	10.5	20.0	20.5	23.5	21.0	15.0
27				.0	.0	1.5	11.0	21.0	22.0	23.5	21.0	15.0
28				.0	.0	1.5	11.0	22.0	22.0	22.0	21.5	14.5
29				.0	---	3.0	12.0	22.5	22.0	22.5	21.0	13.5
30				.0	---	2.0	11.5	22.5	23.0	21.0	21.0	14.0
31				.0	---	4.5	---	22.5	---	20.0	21.5	---
MEAN				.0	.0	.5	6.5	14.5	19.5	22.0	22.0	17.5

WTR YR 1978 MEAN 12.5 MAX 26.0 MIN .0

04217500 TONAWANDA CREEK NEAR ALABAMA, NY

LOCATION.--Lat 43°05'28", long 78°27'15", Genesee County, Hydrologic Unit 04120104, on right bank 15 ft (5 m) downstream from bridge on Meadville Road, 0.4 mi (0.6 km) downstream from inoperable canal feeder connecting Tonawanda and Oak Orchard Creeks, 1.1 mi (1.8 km) upstream from small tributary, and 3.2 mi (5.1 km) west of Alabama.

DRAINAGE AREA.--231 mi^2 (598 km^2).

PERIOD OF RECORD.--October 1955 to current year.

REVISED RECORDS.--WSP 1912: Drainage area. WRD NY 1974: 1973. WDR NY-75-1: 1959 (P).

GAGE.--Water-stage recorder. Datum of gage is 605.93 ft (184.687 m) National Geodetic Vertical Datum of 1929. Prior to October 1965, nonrecording gage at same site and datum.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--23 years, 282 ft^3/s (7.986 m^3/s), 16.58 in/yr (421 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,980 ft^3/s (226 m^3/s) Mar. 31, 1960, gage height, 14.28 ft (4.353 m); maximum gage height, 15.95 ft (4.862 m) Jan. 23, 1959 (ice jam); minimum daily, 7.7 ft^3/s (0.22 m^3/s) Sept. 14, 15, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,100 ft^3/s (59.5 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Dec. 16	0930	*6,830	193	*14.04	4.279	Apr. 2	2130	2,850	80.7	11.84	3.609
Dec. 20	0530	3,390	96.0	12.49	3.807	Apr. 6	0700	3,150	89.2	12.25	3.734
Mar. 23	1030	3,680	104	12.72	3.877						

Minimum daily discharge, 15 ft^3/s (0.42 m^3/s) Sept. 7, 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	637	128	608	280	450	170	1190	170	93	41	31	17
2	1140	123	1240	260	400	160	2360	160	86	39	27	17
3	1400	119	785	230	370	160	1760	150	80	37	33	19
4	1240	141	420	190	340	160	948	150	75	43	42	18
5	757	235	300	210	310	160	1710	155	72	44	72	17
6	487	313	220	230	290	150	2630	215	69	45	46	16
7	444	250	280	250	280	150	1340	253	75	41	37	15
8	358	698	250	400	270	150	1330	199	138	35	45	15
9	349	838	240	800	260	150	985	192	151	33	38	19
10	642	473	230	1300	250	160	625	218	113	33	35	23
11	528	823	220	800	250	170	564	210	88	32	33	19
12	377	1090	240	700	250	180	766	174	75	30	31	45
13	384	693	400	600	240	200	748	166	68	28	29	74
14	322	552	1000	480	230	300	552	221	63	27	27	45
15	277	480	2910	400	230	600	444	664	68	27	26	39
16	261	616	5980	350	220	1100	368	529	64	25	49	60
17	250	872	2880	310	210	1500	331	464	60	24	38	100
18	310	1030	1500	290	210	1300	299	1060	59	24	34	84
19	308	1330	2500	270	200	1000	280	836	84	25	30	250
20	256	1030	2820	250	200	800	316	410	78	24	40	230
21	271	620	1430	250	190	1000	650	359	75	23	36	150
22	223	698	1050	240	190	2000	720	517	254	21	44	94
23	206	560	752	230	190	3450	620	302	230	20	35	70
24	202	427	654	220	180	3080	470	233	110	21	30	59
25	181	403	828	220	180	1990	340	199	78	21	29	51
26	172	346	1060	290	170	1180	280	172	65	20	28	47
27	164	308	600	500	170	1150	250	151	59	24	29	45
28	155	280	450	720	170	1240	220	136	53	38	29	44
29	147	276	350	660	---	1220	200	124	47	47	25	43
30	138	271	320	560	---	1170	180	113	44	44	23	41
31	132	---	290	490	---	991	---	103	---	35	19	---
TOTAL	12718	16021	32807	12970	6900	27191	23476	9005	2674	971	1070	1766
MEAN	410	534	1058	418	246	877	783	290	89.1	31.3	34.5	58.9
MAX	1400	1330	5980	1300	450	3450	2630	1060	254	47	72	250
MIN	132	119	220	190	170	150	180	103	44	20	19	15
CFSM	1.78	2.31	4.58	1.81	1.07	3.80	3.39	1.26	.39	.14	.15	.26
IN.	2.05	2.58	5.28	2.09	1.11	4.38	3.78	1.45	.43	.16	.17	.28

CAL YR 1977 TOTAL 181416 MEAN 497 MAX 5980 MIN 27 CFSM 2.15 IN 29.21
WTR YR 1978 TOTAL 147564 MEAN 404 MAX 5980 MIN 15 CFSM 1.75 IN 23.76

04218000 TONAWANDA CREEK AT RAPIDS, NY

LOCATION.--Lat 43°05'35", long 78°38'11", Niagara County, Hydrologic Unit 04120104, on right bank at downstream side of bridge on Rapids Road at Rapids, 4.6 mi (7.4 km) east of Pendleton, 4.9 mi (7.9 km) downstream from Beeman Creek, and 5.9 mi (9.5 km) upstream from Mud Creek.

DRAINAGE AREA.--351 mi² (909 km²), includes 0.76 mi² (1.97 km²) in Mud Creek from which flow is diverted into Black Creek.

PERIOD OF RECORD.--August 1955 to September 1965, March to September 1978 (gage heights only).

GAGE.--Water-stage recorder. Datum of gage is 571.19 ft (174.099 m) National Geodetic Vertical Datum of 1929.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,280 ft³/s (178 m³/s) Apr. 1, 1960, gage height, 16.96 ft (5.169 m); minimum daily, 6.8 ft³/s (0.19 m³/s) Sept. 29, 30, 1965; minimum gage height, 1.13 ft (0.344 m) Sept. 11, 1978.

EXTREMES FOR MARCH TO SEPTEMBER 1978.--Maximum gage height, 14.79 ft (4.508 m) Mar. 24; minimum, 1.13 ft (0.344 m) Sept. 11.

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1						2.77	6.60	2.16	1.73	1.39	1.36	1.19
2						2.79	7.11	2.10	1.67	1.38	1.31	1.18
3						2.77	9.13	2.06	1.63	1.36	1.29	1.17
4						2.79	8.79	2.04	1.59	1.36	1.36	1.15
5						2.80	6.76	2.02	1.55	1.39	1.40	1.17
6						2.78	7.98	2.09	1.55	1.41	1.46	1.18
7						2.76	10.27	2.29	1.55	1.41	1.37	1.16
8						2.74	8.29	2.38	1.73	1.38	1.30	1.15
9						2.72	7.01	2.27	1.99	1.35	1.34	1.14
10						2.67	5.69	2.25	2.00	1.33	1.32	1.15
11						2.67	4.34	2.31	1.85	1.32	1.28	1.13
12						2.71	4.00	2.29	1.70	1.31	1.26	1.19
13						2.75	4.41	2.20	1.61	1.29	1.24	1.25
14						2.91	4.30	2.32	1.55	1.28	1.23	1.32
15						4.49	3.61	2.89	1.51	1.27	1.21	1.43
16						6.88	3.12	3.87	1.52	1.26	1.20	1.38
17						8.55	2.84	3.60	1.51	1.25	1.34	1.39
18						9.80	2.69	3.76	1.44	1.24	1.32	1.55
19						10.84	2.59	5.04	1.47	1.22	1.29	1.71
20						10.45	2.61	4.49	1.57	1.23	1.28	2.24
21						10.29	3.51	3.22	1.58	1.23	1.32	2.52
22						12.00	4.80	3.03	1.56	1.23	1.30	2.05
23						14.07	4.74	3.16	2.11	1.21	1.31	1.76
24						14.75	4.30	2.70	2.11	1.20	1.29	1.57
25						14.12	3.65	2.42	1.76	1.21	1.26	1.47
26						11.97	2.97	2.27	1.61	1.21	1.24	1.40
27						8.72	2.63	2.17	1.54	1.25	1.22	1.36
28						7.68	2.47	2.09	1.49	1.27	1.22	1.35
29						7.68	2.35	1.99	1.46	1.35	1.23	1.33
30						7.44	2.25	1.89	1.42	1.43	1.22	1.31
31						7.07	---	1.81	---	1.42	1.21	---
MEAN						6.63	4.86	2.62	1.65	1.30	1.29	1.41
MAX						14.75	10.27	5.04	2.11	1.43	1.48	2.52
MIN						2.67	2.25	1.81	1.42	1.20	1.20	1.13

04218190 BLACK CREEK NEAR SWORMVILLE, NY

LOCATION.--Lat 43°03'33", long 78°41'50", Erie County, Hydrologic Unit 04120104, at bridge on State Highway 78, 350 ft (110 m) north of Wolcott Road, 1.4 mi (2.3 km) upstream from mouth, 1.4 mi (2.3 km) north of Swormville, and 1.6 mi (2.6 km) south of junction of State Highways 78 and 263 at Millersport.

DRAINAGE AREA.--10.1 mi² (26.2 km²).

PERIOD OF RECORD.--March 1978 to September 1978.

GAGE.--Water-stage recorder. Datum of gage is 573.74 ft (174.876 m) National Geodetic Vertical Datum of 1929 (Corps of Engineers bench mark).

REMARKS.--Flood flows from Tonawanda Creek can enter Black Creek at the extreme upstream end of the basin.

EXTREMES FOR CURRENT YEAR.--Maximum gage height during period March to September, 8.82 ft (2.688 m) Mar. 25; minimum 2.37 ft (0.722 m) July 26.

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1						4.15	4.74	3.35	3.25	2.90	2.48	2.79
2						4.15	4.50	3.32	3.25	2.86	2.45	2.77
3						4.15	4.25	3.30	3.20	2.85	2.59	2.76
4						4.10	4.22	3.29	3.15	2.89	2.66	2.74
5						4.10	4.75	3.31	3.15	2.87	2.64	2.72
6						4.10	4.36	3.38	3.10	2.83	2.62	2.70
7						4.05	4.84	3.43	3.10	2.81	2.61	2.68
8						4.05	4.45	3.44	3.55	2.79	2.60	2.67
9						4.05	4.16	3.49	3.66	2.77	2.59	2.67
10						4.05	4.05	3.49	3.58	2.75	2.57	2.65
11						4.04	4.04	3.46	3.48	2.72	2.56	2.63
12						4.05	4.19	3.43	3.43	2.70	2.54	3.02
13						4.14	4.03	3.44	3.40	2.67	2.52	3.23
14						4.91	3.94	3.98	3.37	2.66	2.50	3.22
15						5.82	3.90	4.52	3.35	2.63	2.48	3.22
16						6.37	3.88	4.20	3.33	2.61	2.47	3.35
17						6.83	3.86	4.37	3.33	2.58	2.46	3.49
18						6.44	3.85	4.36	3.32	2.56	2.44	3.75
19						6.37	3.87	4.09	3.32	2.53	2.47	4.43
20						6.32	4.12	3.89	3.31	2.51	2.63	3.88
21						6.87	5.47	4.07	3.32	2.49	2.61	3.51
22						7.16	5.09	3.97	3.32	2.47	2.59	3.37
23						6.88	4.47	3.78	3.30	2.45	2.59	3.29
24						7.24	4.13	3.67	3.22	2.43	2.62	3.24
25						8.66	3.88	3.57	3.17	2.40	2.70	3.20
26						7.85	3.70	3.50	3.14	2.38	2.77	3.17
27						6.44	3.58	3.44	3.11	2.54	2.80	3.15
28						5.48	3.51	3.39	3.08	2.54	2.80	3.16
29						5.11	3.47	3.34	3.05	2.52	2.80	3.14
30						4.76	3.40	3.30	3.00	2.51	2.82	3.13
31						4.63	---	3.25	---	2.49	2.81	---
MEAN						5.40	4.16	3.64	3.28	2.64	2.61	3.12
MAX						8.66	5.47	4.52	3.66	2.90	2.82	4.43
MIN						4.04	3.40	3.25	3.00	2.38	2.44	2.63

04218518 ELLICOTT CREEK BELOW WILLIAMSVILLE, NY

LOCATION.--Lat 42°58'40", long 78°45'50", Erie County, Hydrologic Unit 04120104, on right bank 15 ft (5 m) upstream from bridge on State Highway 324 (Sheridan Drive), 0.8 mi (1.3 km) upstream from sewage treatment plant, and 1.4 mi (2.3 km) northwest of Williamsville.

DRAINAGE AREA.--77.6 mi^2 (201 km^2).

PERIOD OF RECORD.--October 1972 to current year.

GAGE.--Water-stage recorder. Datum of gage is 586.41 ft (178.738 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except those for winter periods and those for period of no gage-height record, June 7 to July 12, which are poor. Regulation by intermittent pumping from stone quarry into stream upstream from station. Records at medium and high flows may be comparable with those obtained at station 04218500 between October 1955 and September 1972.

AVERAGE DISCHARGE.--6 years, 141 ft^3/s (3.993 m^3/s), 24.68 in/yr (627 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,490 ft^3/s (70.5 m^3/s) Sept. 26, 1977, gage height, 9.23 ft (2.813 m); no flow for part of July 27, 1976, gage height, 0.73 ft (0.222 m), result of pipeline construction.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,000 ft^3/s (28.3 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Dec. 16	0630	1,760	49.8	7.38	2.249	Mar. 22	2345	*1,940	54.9	*7.84	2.390
Dec. 19	2245	1,890	53.5	7.75	2.362	Apr. 5	2300	1,050	29.7	5.40	1.646
Jan. 10	0630	1,080	30.6	5.49	1.673						

Minimum discharge, 2.3 ft^3/s (0.065 m^3/s) July 19, gage height 0.90 ft (0.274 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	353	23	408	120	100	36	318	42	46	11	11	7.4
2	639	20	761	110	92	35	454	43	41	9.6	16	6.0
3	623	19	361	100	88	34	263	40	37	9.0	57	6.9
4	408	29	228	94	80	34	206	38	28	15	31	6.4
5	239	83	137	96	72	33	628	40	23	25	20	6.0
6	168	104	90	100	68	33	631	61	24	14	14	4.9
7	158	147	90	120	66	34	326	84	22	8.4	15	5.6
8	142	311	94	235	66	35	308	64	27	7.0	19	13
9	182	239	100	613	66	37	200	71	60	6.2	8.4	10
10	256	194	94	921	64	39	148	84	42	22	6.9	16
11	212	514	90	410	64	42	126	81	23	22	5.2	17
12	203	456	98	240	64	46	148	59	16	20	6.4	72
13	280	269	110	180	62	66	155	57	21	18	4.2	35
14	192	203	501	140	58	160	111	178	32	10	3.3	30
15	125	200	1110	120	54	210	96	412	24	6.0	2.7	37
16	108	255	1620	110	52	520	87	190	18	3.6	5.2	56
17	98	434	903	100	49	440	76	248	15	3.0	5.2	54
18	92	637	704	96	46	320	77	522	13	3.0	4.9	103
19	91	563	1450	90	43	270	78	226	30	3.0	27	90
20	70	323	1360	84	40	250	96	125	32	3.3	21	186
21	72	207	586	78	37	640	266	155	34	3.6	11	81
22	63	219	420	74	36	1400	364	204	200	11	12	46
23	40	180	248	72	36	1650	261	109	66	16	11	43
24	39	145	250	74	36	1390	175	85	45	11	42	37
25	43	165	475	88	36	622	114	56	30	4.5	30	34
26	52	129	484	150	35	323	84	61	22	5.6	27	18
27	50	106	259	160	35	367	72	56	16	37	11	13
28	41	93	190	170	36	459	67	50	15	21	13	7.4
29	36	111	160	150	---	412	59	32	13	22	20	11
30	33	110	150	140	---	343	43	31	12	8.4	21	10
31	29	---	130	120	---	287	---	35	---	5.2	18	---
TOTAL	5137	6488	13661	5365	1581	10567	6039	3539	1029	364.4	499.4	1062.6
MEAN	166	216	441	173	56.5	341	201	114	34.3	11.8	16.1	35.4
MAX	639	637	1620	921	100	1650	631	522	200	37	57	186
MIN	29	19	90	72	35	33	43	31	12	3.0	2.7	4.9
CFSM	2.14	2.78	5.68	2.23	.73	4.39	2.59	1.47	.44	.15	.21	.46
IN.	2.46	3.11	6.55	2.57	.76	5.07	2.89	1.70	.49	.17	.24	.51

CAL YR 1977 TOTAL 80829.8 MEAN 221 MAX 2190 MIN 6.8 CFSM 2.85 IN 38.75
WTR YR 1978 TOTAL 55332.4 MEAN 152 MAX 1650 MIN 2.7 CFSM 1.96 IN 26.52

04218592 DONNER BROOK NEAR LOCKPORT, NY

LOCATION.--Lat 43°07'23", long 78°43'49", Niagara County, Hydrologic Unit 04120104, on right bank 25 ft (7.6 m) downstream from bridge on East Canal Road, 400 ft (122 m) south of intersection with Donner Road, 2.1 mi (3.4 km) south of Lockport, and 2.1 mi (3.4 km) upstream from mouth at Erie (Barge) Canal.

DRAINAGE AREA.--3.75 mi^2 (9.71 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1977 to September 1978 (seasonal records only); discontinued.

GAGE.--Water-stage recorder. Altitude of gage is 580 ft (177 m), from topographic map.

REMARKS.--Records fair except those for period of no gage-height record, June 19 to Aug. 1, which are poor.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period November and April to September, 95 ft^3/s (2.69 m^3/s) Nov. 17, gage height, 4.76 ft (1.451 m); no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		.47					15	1.1	.51	.04	.03	.00
2		.44					7.0	1.1	.38	.03	.02	.00
3		.41					3.8	1.0	.90	.02	.18	.00
4		.41					4.3	1.0	.25	2.0	1.5	.00
5		.72					9.2	1.7	.22	.60	.47	.00
6		.51					4.4	2.2	.22	.15	.10	.00
7		4.2					12	1.5	4.9	.05	.02	.00
8		14					5.1	1.3	2.5	.04	.00	.00
9		5.6					2.8	2.0	.30	.03	.00	.00
10		14					2.5	1.4	.16	.02	.00	.00
11		31					3.9	1.2	.13	.01	.00	.00
12		18					5.1	1.0	.18	.00	.00	.03
13		9.2					2.8	1.3	.13	.00	.00	.82
14		6.8					2.4	14	.11	.00	.00	.16
15		6.0					2.0	7.2	.13	.00	.00	.06
16		7.1					1.7	2.8	.13	.00	.00	.51
17		57					1.5	3.4	.11	.00	.00	1.8
18		27					1.7	2.9	.18	.00	.00	3.7
19		7.5					3.1	1.9	.12	.00	.00	7.7
20		4.6					9.5	1.3	.10	.00	.27	.88
21		4.4					30	2.8	3.3	.00	.41	.30
22		3.4					15	1.4	1.6	.00	.05	.22
23		2.9					4.6	1.1	.60	.00	.01	.22
24		5.3					2.8	.94	.16	.00	.00	.16
25		3.4					2.1	.77	.11	.00	.00	.08
26		3.0					1.7	.72	.09	.10	.10	.02
27		2.5					1.5	.68	.08	1.0	.13	.00
28		2.1					1.3	.59	.07	.41	.01	.00
29		2.0					1.2	.55	.06	.16	.00	.05
30		3.3					1.1	.51	.05	.07	.00	.11
31		---					---	.51	---	.03	.00	---
TOTAL		247.26					161.1	61.87	17.78	4.76	3.30	16.82
MEAN		8.24					5.37	2.00	.59	.15	.11	.56
MAX		57					30	14	4.9	2.0	1.5	7.7
MIN		.41					1.1	.51	.05	.00	.00	.00
CFSM		1.94					1.26	.47	.14	.04	.03	.13
IN.		2.16					1.41	.54	.16	.04	.03	.15

04218592 DONNER BROOK NEAR LOCKPORT, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April to September 1978.
CHEMICAL DATA: 1978 (b).
NUTRIENT DATA: 1978 (a).

WATER QUALITY DATA, OCTOBER 1977 TO OCTOBER 1978

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	COLIFORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
MAY , 1978 12...	0800	1.1	860	7.1	14.5	3	6.0	59	--	--	--
JUN 06...	1700	.20	640	8.5	23.0	4	13.3	160	290	104	K12
AUG 01...	1000	.05	650	6.9	20.0	2	8.2	91	--	--	--
OCT 02...	1500	.54	540	7.1	15.0	2	9.3	93	--	--	--

DATE	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)
MAY , 1978 12...	480	220	94	60	37	3.7	320	0	260	110	55
JUN 06...	300	71	78	26	27	2.2	230	25	230	93	37
AUG 01...	290	140	83	21	20	2.7	190	0	160	130	26
OCT 02...	220	96	63	15	18	3.5	150	0	120	100	25

DATE	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, TOTAL (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)
MAY , 1978 12...	526	3	--	.47	.05	.52	.08	1.0	1.1	1.6	.41
JUN 06...	425	0	440	--	--	--	--	--	--	--	--
AUG 01...	437	2	--	.01	.01	.02	.05	.91	.96	.98	.26
OCT 02...	327	2	--	.37	.01	.38	.01	.48	.49	.87	.07

DATE	PHOSPHORUS, ORTHO. TOTAL (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)
MAY , 1978 12...	.27	--	--	--	--	--	--	--	--	--	--
JUN 06...	--	3	0	<10	3	190	1	20	<.5	0	20
AUG 01...	.22	--	--	--	--	--	--	--	--	--	--
OCT 02...	.04	--	--	--	--	--	--	--	--	--	--

K Results based on colony count outside the acceptable range (non-ideal colony count).

04219000 ERIE (BARGE) CANAL AT LOCK 30, MACEDON, NY

LOCATION.--Lat 43°04'20", long 77°17'45", Wayne County, Hydrologic Unit 04140201, on left bank in Macedon, 500 ft (152 m) downstream from headgate in old Erie Canal, 700 ft (213 m) downstream from bridge on State Highway 350, 0.2 mi (0.3 km) downstream from Lock 30, and 2.6 mi (4.2 km) upstream from Ganargua Creek.

PERIOD OF RECORD.--November 1919 to December 1920, October 1977 to current year (navigation seasons only), October 1950 to September 1977. Prior to October 1956, published as "Barge Canal at Lock 30, Macedon."

REVISED RECORDS.--WSP 1237: 1951.

GAGE.--Water-stage recorder. Datum of gage is 447.58 ft (136.422 m) National Geodetic Vertical Datum of 1929. Nov. 1, 1919 to Dec. 28, 1920, nonrecording gage at same site at different datum.

REMARKS.--Records good except those for non-navigation season, which are poor. This record represents net diversion from Niagara River basin into Oswego River basin through Erie (Barge) Canal. During the period when the navigation pool upstream from Lock 30 is completely lowered, from Dec. 13 to Apr. 18, discharge consists chiefly of leakage through guard gates and runoff from small areas tributary to canal upstream from station.

COOPERATION.--Records of gate openings, lockages, lock-value openings, and elevations of water surface in Erie (Barge) Canal upstream and downstream from Lock 30 furnished by New York State Department of Transportation.

AVERAGE DISCHARGE.--27 years (1950-77), 200 ft³/s (5.664 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 874 ft³/s (24.8 m³/s) Dec. 3, 1969; minimum daily, 0.8 ft³/s (0.023 m³/s) Feb. 25, 26, 1962.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	287	268	189				52	63	113	284	263	268
2	291	268	212				52	11	106	289	267	286
3	300	270	215				52	44	111	288	287	287
4	304	268	172				52	69	113	283	272	279
5	291	270	132				52	108	107	283	292	264
6	284	272	91				52	91	107	287	280	265
7	287	268	47				52	71	114	280	276	261
8	282	267	23				52	67	108	282	272	264
9	281	268	17				52	104	107	284	259	270
10	280	269	13				52	133	119	277	268	264
11	279	274	7.3				52	133	221	274	263	263
12	281	272	218				52	85	107	271	279	265
13	276	270	150				50	68	107	269	287	262
14	277	274	100				50	110	122	283	270	263
15	270	278	100				50	130	107	276	263	267
16	277	282	92				50	130	119	289	270	294
17	290	287	86				50	119	123	293	272	274
18	285	293	82				26	39	114	270	267	273
19	279	290	92				2.0	65	188	279	275	335
20	272	279	76				3.0	85	266	275	267	269
21	272	246	78				2.7	97	269	280	269	262
22	275	267	70				2.1	114	274	296	263	264
23	280	204	64				1.9	121	278	283	266	278
24	279	184	60				2.0	119	277	275	260	268
25	276	183	60				2.0	122	281	278	266	273
26	276	182	60				1.9	123	276	271	270	263
27	276	181	56				1.9	127	279	282	269	269
28	273	181	54				3.0	117	268	279	264	257
29	272	180	52				4.6	135	273	279	261	257
30	280	183	50				7.3	114	285	296	266	265
31	271	---	50				---	122	---	269	269	---
TOTAL	8703	7478	2768.3				934.4	3036	5339	8704	8372	8129
MEAN	281	249	89.3				31.1	97.9	178	281	270	271
MAX	304	293	218				52	135	285	296	292	335
MIN	270	180	7.3				1.9	11	106	269	259	257

CAL YR 1977 TOTAL 65243.6 MEAN 179 MAX 340 MIN 3.6

04219640 NIAGARA RIVER (LAKE ONTARIO) AT FORT NIAGARA, NY
(National stream-quality accounting network station)

LOCATION.--Lat 43°15'40", long 79°03'47", Niagara County, Hydrologic Unit 04120200, on U.S. Coast Guard wharf at Old Fort Niagara, at mouth of Niagara River, and 1.0 mi (1.6 km) northwest of Youngstown.

DRAINAGE AREA.--265,000 mi² (686,350 km²).

PERIOD OF RECORD.--Water years 1971 to current year.
CHEMICAL DATA: 1971 (a), 1973-74 (b), 1975-78 (c).
MINOR ELEMENTS DATA: 1971 (a), 1972-78 (b).
ORGANIC DATA: TOC--1973 (a), 1974-75 (b), 1978 (b).
NUTRIENT DATA: 1971 (a), 1973-74 (b), 1975-78 (c).
BIOLOGICAL DATA:
Coliform bacteria--1973 (b), 1974 (d), 1975-78 (c).
Phytoplankton--1973 (b), 1974 (d), 1975-77 (c), 1978 (b).
Periphyton--1974 (a), 1975-78 (b).
SEDIMENT DATA: 1975-77 (c), 1978 (b).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: September 1973 to current year.
WATER TEMPERATURES: September 1973 to current year.

INSTRUMENTATION.--Water-quality monitor since September 1973.

REMARKS.--Discharge is estimated on the basis of records for station 04216000 Niagara River at Buffalo. Published in 1971 as "at Youngstown;" sampling site 4 mi (6.4 km) upstream from present sampling site. Interruptions in the record were due to instrument malfunctions.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum recorded (water year 1978), 333 micromhos March 15, 16, 1978; minimum recorded (water year 1978), 205 micromhos Jan. 9, 1978.
WATER TEMPERATURES: Maximum recorded (water years 1977-78), 25.5°C July 20, 21, 22, 1977; minimum (water years 1976-78), freezing point on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum recorded, 333 micromhos Mar. 15, 16; minimum recorded, 205 micromhos Jan. 9.
WATER TEMPERATURES: Maximum, 25.0°C Aug. 22; minimum, freezing point on many days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW (CFS)	PH (UNITS)	TUR-BID-ITY (JTU)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
OCT												
11...	1400	E236000	7.5	9	--	9.6	94	240	K110	130	43	40
31...	1400	E205000	7.7	2	--	9.8	92	28	K19	130	39	38
APR												
25...	1200	E247000	7.5	2	--	12.2	94	47	35	130	35	38
MAY												
17...	1200	E243000	7.0	4	--	9.6	75	K150	100	110	29	32
JUL												
17...	1400	E234000	7.9	--	2.0	7.1	84	K89	41	130	41	37
AUG												
22...	1400	E226000	7.9	--	1.0	8.1	95	270	36	130	42	38
SEP												
20...	1400	E215000	7.0	--	1.0	8.3	90	430	38	130	37	38

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)
OCT											
11...	8.0	11	1.6	110	0	90	24	20	.1	.5	177
31...	8.4	11	1.6	110	0	90	25	21	.1	.1	178
APR											
25...	7.4	10	1.4	110	0	90	24	20	.2	.5	166
MAY											
17...	7.2	10	1.4	98	0	80	25	21	.1	7.0	173
JUL											
17...	8.6	10	1.5	--	--	87	24	22	.1	.2	177
AUG											
22...	8.7	10	1.5	--	--	89	27	19	.1	.6	171
SEP											
20...	8.3	10	1.5	--	--	92	27	21	.1	.5	171

E Estimated.

K Results based on colony count outside the acceptable range (non-ideal colony count).

04219640 NIAGARA RIVER (LAKE ONTARIO) AT FORT NIAGARA, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)
OCT											
11...	159	.14	--	--	.21	--	.35	.03	--	0	0
31...	159	.10	.02	.20	.22	.28	.32	.01	.03	--	--
APR											
25...	156	.21	.03	.23	.26	.24	.47	.02	.00	--	--
MAY											
17...	152	.23	.03	.32	.35	--	.58	.03	--	1	0
JUL											
17...	156	.23	.06	.17	.23	.06	.46	.01	.00	1	1
AUG											
22...	158	.19	.12	.42	.54	.39	.73	.01	.00	--	--
SEP											
20...	162	.11	.01	.54	.55	.51	.66	.02	.00	1	1

DATE	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)
OCT											
11...	--	--	0	0	10	1	0	0	4	1	670
31...	--	--	--	--	--	--	--	--	--	--	--
APR											
25...	--	--	--	--	--	--	--	--	--	--	--
MAY											
17...	0	0	0	0	<10	1	0	0	11	3	230
JUL											
17...	0	0	0	0	10	0	2	0	4	2	80
AUG											
22...	--	--	--	--	--	--	--	--	--	--	--
SEP											
20...	0	0	1	0	10	1	1	0	8	7	100

DATE	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)
OCT											
11...	20	13	5	20	0	.5	.5	0	0	--	--
31...	--	--	--	--	--	--	--	--	--	--	--
APR											
25...	--	--	--	--	--	--	--	--	--	--	--
MAY											
17...	90	2	2	20	10	<.5	<.5	0	0	1	0
JUL											
17...	20	8	2	10	0	.5	.5	0	0	0	0
AUG											
22...	--	--	--	--	--	--	--	--	--	--	--
SEP											
20...	0	9	4	10	10	<.5	<.5	0	0	0	0

04219640 NIAGARA RIVER (LAKE ONTARIO) AT FORT NIAGARA, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C)
OCT					
11...	10	0	9.0	--	--
31...	--	--	4.2	--	--
APR					
25...	--	--	9.2	--	--
MAY					
17...	20	0	--	7.8	.6
JUN					
13...	--	--	8.7	--	--
JUL					
17...	30	0	--	3.5	.7
AUG					
22...	--	--	4.9	--	--
SEP					
20...	30	0	--	14	.4

DATE	TIME	SAMPLING DEPTH (FT)	SAMPLE LOCATION, CROSS SECTION (FT FM L BANK)	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
OCT					
11...	1405	3.0	300	280	15.0
11...	1410	10	300	290	14.5
11...	1415	35	300	290	14.5
11...	1420	60	300	300	14.5
11...	1430	3.0	800	300	14.5
11...	1435	10	800	300	14.5
11...	1440	40	800	295	14.5
11...	1445	65	800	305	14.5
11...	1500	3.0	1600	290	15.0
11...	1505	10	1600	305	14.5
11...	1510	30	1600	300	14.5
11...	1515	55	1600	305	14.5
31...	1350	3.0	300	280	12.5
31...	1355	10	300	290	12.0
31...	1405	35	300	290	12.0
31...	1410	60	300	300	12.0
31...	1425	3.0	800	285	12.0
31...	1430	10	800	295	12.0
31...	1435	35	800	295	12.0
31...	1440	60	800	305	12.0
31...	1500	3.0	1300	295	12.5
OCT					
31...	1505	10	1300	305	12.0
31...	1510	30	1300	300	12.0
31...	1515	50	1300	305	12.0
MAY					
17...	1315	3.0	200	265	5.0
17...	1320	10	200	270	4.5
17...	1325	35	200	270	4.0
17...	1330	60	200	270	4.0
17...	1345	3.0	800	270	4.5
17...	1350	10	800	275	4.0
17...	1355	35	800	275	4.0
17...	1400	60	800	270	4.0
17...	1415	3.0	1400	275	4.5
17...	1420	10	1400	275	4.0
17...	1425	30	1400	275	4.0
17...	1430	50	1400	275	4.0
JUL					
17...	1430	3.0	200	290	22.0
17...	1435	10	200	290	22.0
JUL					
17...	1440	25	200	295	21.5
17...	1445	40	200	300	21.5
17...	1455	3.0	800	295	21.5
17...	1500	10	800	300	21.5
17...	1505	35	800	295	21.5
17...	1510	60	800	295	21.5
17...	1520	3.0	1400	300	21.5
17...	1525	10	1400	300	21.5
17...	1530	30	1400	300	21.5
17...	1535	50	1400	300	21.5
AUG					
22...	1340	3.0	200	290	23.0
22...	1345	10	200	295	23.0
22...	1350	25	200	295	23.0
22...	1355	40	200	300	23.0
22...	1410	3.0	800	295	23.0
22...	1415	10	800	290	23.0
22...	1420	30	800	290	23.0
22...	1425	50	800	295	23.0
AUG					
22...	1440	3.0	1400	295	23.0
22...	1445	10	1400	290	23.0
22...	1450	22	1400	295	23.0
22...	1455	35	1400	290	23.0
SEP					
20...	1330	3.0	200	285	19.5
20...	1335	10	200	285	19.0
20...	1340	30	200	290	19.0
20...	1345	50	200	290	19.0
20...	1400	3.0	800	295	19.0
20...	1405	10	800	295	19.0
20...	1410	30	800	295	19.0
20...	1415	50	800	295	19.0
20...	1430	3.0	1400	295	19.5
20...	1435	10	1400	295	19.0
20...	1440	20	1400	295	19.0
20...	1445	30	1400	295	19.5

04219640 NIAGARA RIVER (LAKE ONTARIO) AT FORT NIAGARA, NY--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

PHYTOPLANKTON

DATE	OCT 31.77	MAY 17.78	JUN 13.78
TIME	1400	1200	1400
TOTAL CELLS/ML	23000	1000	630
DIVERSITY: DIVISION	0.9	1.3	1.5
.CLASS	0.9	1.4	1.5
..ORDER	1.7	2.1	1.5
...FAMILY	1.9	2.5	1.7
....GENUS	2.0	3.3	1.8

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)						
.CHLOROPHYCEAE						
..CHLOROCOCCALES						
...COELASTRACEAE						
....COELASTRUM	890	4	--	-	--	-
...MICRACTINIACEAE						
....GOLENKINIA	--	-	--	-	15	2
...OOCYSTACEAE						
....ANKISTRODESMUS	*	0	54	5	--	-
....DICTYOSPHAERIUM	1500	6	--	-	--	-
...SCENEDESMACEAE						
....SCENEDESMUS	*	0	--	-	260#	42
..TETRASPORALES						
...PALMELLACEAE						
....SPHAEROCYSTIS	*	0	--	-	--	-
..VOLVOCALES						
...CHLAMYDOMONADACEAE						
....CARTERIA	*	0	--	-	--	-
....CHLAMYDOMONAS	300	1	--	-	--	-
..ZYGNEMATALES						
...DESMIDIACEAE						
....STAURASTRUM	*	0	--	-	--	-
CHRYSOPHYTA						
.BACILLARIOPHYCEAE						
..CENTRALES						
...COSCINODISCACEAE						
....CYCLOTELLA	200	1	150	15	--	-
....MELOSIRA	*	0	150	15	--	-
....STEPHANODISCUS	120	1	14	1	--	-
..PENNALES						
...ACHNANTHACEAE						
....COCCONEIS	*	0	--	-	--	-
...FRAGILARIACEAE						
....ASTERIONELLA	--	-	220#	22	--	-
....FRAGILARIA	--	-	41	4	160#	26
....SYNEDRA	--	-	54	5	15	2
...GOMPHONEMATACEAE						
....GOMPHONEMA	--	-	27	3	--	-
...NAVICULACEAE						
....NAVICULA	--	-	68	7	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)						
.CYANOPHYCEAE						
..CHROCCOCCALES						
...CHROCCOCCAEAE						
....ANACYSTIS	300	1	--	-	180#	28
..HORMOGONALES						
...OSCILLATORIACEAE						
....OSCILLATORIA	5900#	26	--	-	--	-
..CHROCCOCCALES						
...CHROCCOCCAEAE						
....GOMPHOSPHAERIA	13000#	55	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)						
.CRYPTOPHYCEAE						
..CRYPTOMONIDALES						
...CRYPTOCHRYSIDACEAE						
....CHROOMONAS	630	3	--	-	--	-
...CRYPTOMONODACEAE						
....CRYPTOMONAS	160	1	81	8	--	-
.EUGLENOPHYCEAE						
..EUGLENALES						
...EUGLENACEAE						
....EUGLENA	*	0	81	8	--	-
PYRRHOPHYTA (FIRE ALGAE)						
.DINOPHYCEAE						
..PERIDINIALES						
...GLENODINIACEAE						
....GLENODINIUM	--	-	68	7	--	-

NOTE: # - DOMINANT ORGANISM: EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED: LESS THAN 1/2%

04219640 NIAGARA RIVER (LAKE ONTARIO) AT FORT NIAGARA, NY--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

PERIPHYTON

Dates of exposure	Length of exposure (days)	Biomass (g/m^2) Dry weight	Biomass (g/m^2) Ash weight	Chlorophyll a (mg/m^2)	Chlorophyll b (mg/m^2)	Sampling method
June 13 to July 17	34	13.9	11.7	28.8	2.19	Polyethylene strip
July 17 to Aug. 22	36	77.7	67.3	48.6	13.9	Polyethylene strip
Aug. 22 to Sept. 20	29	--	--	42.3	6.11	Polyethylene strip

SUSPENDED-SEDIMENT MEASUREMENTS, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
OCT				
11...	1400	E236000	19	E12100
31...	1400	E205000	6	E3320
MAY				
17...	1200	E243000	8	E5250
JUN				
13...	1400	E260000	6	E4210
SEP				
20...	1400	E215000	7	E4060

E Estimated.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	294	292	293	303	301	302	306	300	303	291	289	290
2	294	293	293	302	302	302	305	299	302	290	288	289
3	294	292	293	302	300	301	302	299	300	289	274	286
4	297	294	296	301	300	301	299	296	298	290	288	289
5	297	293	295	302	301	301	297	294	296	294	289	291
6	294	292	293	302	301	302	299	295	297	301	294	298
7	294	291	292	302	301	302	299	295	297	301	298	300
8	292	289	291	304	301	303	301	298	299	302	297	299
9	292	289	290	303	302	302	300	292	297	307	205	257
10	293	291	292	303	301	302	299	290	295	234	226	232
11	293	291	292	301	299	300	300	295	298	245	235	240
12	291	289	290	302	299	301	297	293	295	254	245	249
13	291	288	289	300	298	299	300	295	297	290	255	277
14	290	287	288	299	297	298	315	299	308	302	290	299
15	289	287	288	299	297	298	314	301	304	300	297	298
16	291	289	291	301	299	300	301	297	298	300	297	298
17	291	289	290	301	299	300	298	295	297	305	299	300
18	291	289	289	299	297	298	296	292	293	303	298	300
19	292	291	291	298	295	296	293	288	291	304	288	299
20	---	---	---	296	293	295	291	288	289	306	303	305
21	---	---	---	297	295	296	291	288	289	307	279	298
22	---	---	---	296	293	295	291	287	289	282	277	280
23	---	---	---	295	293	294	289	287	288	281	276	279
24	---	---	---	297	293	295	290	265	288	287	279	283
25	---	---	---	295	293	294	292	287	289	304	283	298
26	---	---	---	298	291	293	288	281	285	318	282	301
27	---	---	---	299	297	298	288	281	285	287	282	286
28	---	---	---	298	296	297	288	281	284	290	286	288
29	---	---	---	298	296	297	288	284	286	290	286	288
30	---	---	---	301	296	298	288	286	287	294	288	288
31	---	---	---	---	---	---	291	287	289	292	287	289
MONTH	297	287	291	304	291	299	315	281	294	318	205	286

04219640 NIAGARA RIVER (LAKE ONTARIO) AT FORT NIAGARA, NY--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	297	291	293	312	310	311	323	319	321	283	280	282
2	297	293	295	312	303	310	321	317	320	283	281	282
3	302	294	299	312	310	311	321	318	320	281	279	280
4	301	296	300	311	297	308	320	319	319	281	279	280
5	301	298	300	311	299	306	320	316	319	282	280	281
6	300	290	299	310	286	298	319	316	317	276	274	275
7	300	281	293	311	301	309	319	318	318	275	253	272
8	301	297	299	311	300	309	318	313	316	273	271	272
9	300	277	292	312	308	311	316	313	314	272	266	269
10	300	287	294	313	311	312	315	312	314	267	266	266
11	301	293	299	319	317	318	320	316	318	267	262	265
12	300	298	299	318	318	318	318	314	316	267	266	267
13	300	298	299	321	318	320	316	313	315	270	267	268
14	301	298	299	331	320	324	315	309	313	274	267	270
15	299	291	296	333	329	331	314	312	313	278	274	276
16	305	302	304	333	322	326	308	307	308	280	278	279
17	305	303	304	322	320	321	307	306	307	282	278	279
18	305	287	300	320	317	318	306	305	306	284	280	282
19	304	297	302	318	316	317	305	303	304	284	280	282
20	305	297	301	318	316	317	304	302	303	284	281	283
21	306	301	304	323	321	322	300	298	299	288	284	286
22	306	298	303	322	313	318	300	299	300	289	286	287
23	305	272	295	315	313	314	300	299	299	291	287	289
24	306	302	305	314	312	313	300	299	299	291	289	290
25	307	305	306	314	310	312	299	298	299	291	288	289
26	307	306	306	316	312	314	294	292	293	293	288	290
27	308	306	307	319	314	317	293	291	292	293	291	293
28	307	300	306	320	319	319	292	291	291	294	291	293
29	---	---	---	319	319	319	292	289	290	295	293	294
30	---	---	---	319	316	318	289	287	288	296	293	294
31	---	---	---	319	314	317	---	---	---	294	292	293
MONTH	308	272	300	333	286	315	323	287	308	296	253	281

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	299	293	294	303	300	302	299	297	298	302	300	301
2	300	296	298	300	299	299	300	296	299	301	300	301
3	299	295	298	300	299	299	301	297	300	301	299	301
4	298	296	297	300	298	299	300	298	299	301	299	300
5	299	297	298	301	299	300	299	297	298	301	299	300
6	299	296	298	301	300	300	300	298	299	302	300	301
7	299	296	298	301	299	300	300	299	299	301	299	300
8	300	296	298	301	299	300	301	299	300	301	300	300
9	298	295	296	301	296	300	301	299	300	301	298	300
10	298	295	297	301	299	300	301	299	300	299	297	298
11	299	295	297	301	299	300	300	298	299	300	298	299
12	301	296	298	301	299	300	300	298	299	301	298	299
13	304	296	300	301	299	300	300	298	299	301	299	300
14	304	303	303	301	299	300	300	298	299	300	299	300
15	306	303	304	301	300	301	300	299	300	300	298	299
16	306	304	305	301	298	300	300	299	300	301	298	299
17	307	306	306	304	299	301	299	297	298	301	299	300
18	307	306	307	300	298	299	300	298	299	301	299	300
19	308	307	307	300	297	299	299	296	298	300	295	297
20	308	306	307	301	299	300	296	295	295	300	297	298
21	307	305	306	301	299	300	297	296	296	300	298	299
22	307	304	305	301	299	300	302	294	301	300	297	299
23	305	303	304	301	300	301	302	300	301	298	296	297
24	305	303	304	301	300	300	303	301	302	297	295	296
25	304	302	303	301	300	301	302	300	301	297	295	296
26	305	303	304	301	299	300	302	299	301	296	295	295
27	306	303	304	300	296	299	301	299	300	296	295	296
28	305	303	304	300	298	300	302	300	301	298	295	296
29	305	302	303	299	298	299	302	300	301	298	295	297
30	304	303	303	299	297	299	302	301	302	296	294	295
31	---	---	---	299	298	298	302	300	301	---	---	---
MONTH	308	293	302	304	296	300	303	294	300	302	294	299

04219640 NIAGARA RIVER (LAKE ONTARIO) AT FORT NIAGARA, NY--Continued

TEMPERATURE(DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	18.0	17.5	17.5	12.0	12.0	12.0	6.5	6.0	6.5	.5	.5	.5
2	17.5	17.0	17.0	12.5	12.0	12.5	6.5	6.0	6.0	.5	.0	.0
3	17.0	16.5	17.0	13.0	12.5	12.5	6.0	5.0	5.0	.0	.0	.0
4	17.0	16.5	16.5	13.0	13.0	13.0	5.0	5.0	5.0	.0	.0	.0
5	17.0	16.5	16.5	13.0	12.5	12.5	5.0	4.0	4.5	.0	.0	.0
6	16.5	16.0	16.0	12.5	12.5	12.5	4.0	3.5	4.0	.0	.0	.0
7	16.0	15.5	15.5	12.5	12.5	12.5	4.5	4.0	4.0	.5	.0	.0
8	15.5	15.0	15.0	13.0	12.5	12.5	4.0	3.0	3.5	.5	.5	.5
9	15.0	15.0	15.0	13.0	12.5	13.0	3.0	2.5	3.0	.5	.0	.0
10	15.0	14.5	14.5	13.0	12.5	13.0	2.0	1.0	1.5	.0	.0	.0
11	14.5	14.0	14.5	12.5	11.0	11.5	1.5	1.0	1.0	.0	.0	.0
12	14.5	13.0	14.0	11.0	10.0	10.5	1.5	1.0	1.0	.0	.0	.0
13	13.0	13.0	13.0	10.0	9.0	9.5	2.5	1.5	2.0	.0	.0	.0
14	13.0	13.0	13.0	9.5	9.0	9.5	2.5	2.5	2.5	.0	.0	.0
15	13.0	13.0	13.0	9.5	9.5	9.5	2.5	2.0	2.5	.0	.0	.0
16	13.0	12.5	13.0	9.5	9.5	9.5	2.5	2.5	2.5	.0	.0	.0
17	12.5	12.0	12.0	10.0	9.0	9.5	2.5	2.5	2.5	.0	.0	.0
18	12.0	12.0	12.0	9.0	8.5	8.5	2.5	2.5	2.5	.0	.0	.0
19	12.0	12.0	12.0	8.5	8.0	8.0	3.0	2.5	2.5	.0	.0	.0
20	---	---	---	8.0	8.0	8.0	3.0	2.5	2.5	.0	.0	.0
21	---	---	---	8.0	8.0	8.0	3.0	2.5	2.5	.0	.0	.0
22	---	---	---	8.0	7.5	8.0	2.5	2.0	2.5	.0	.0	.0
23	---	---	---	9.0	7.5	8.0	2.0	1.5	2.0	.0	.0	.0
24	---	---	---	8.0	8.0	8.0	2.0	1.5	1.5	.0	.0	.0
25	---	---	---	8.0	7.5	7.5	2.5	1.0	2.0	.0	.0	.0
26	---	---	---	7.5	5.5	7.0	1.0	.5	.5	.0	.0	.0
27	---	---	---	6.5	6.0	6.0	.5	.0	.5	.0	.0	.0
28	---	---	---	6.0	6.0	6.0	.5	.0	.0	.0	.0	.0
29	---	---	---	6.0	5.5	5.5	.0	.0	.0	.0	.0	.0
30	---	---	---	6.0	5.5	6.0	.5	.0	.5	.0	.0	.0
31	---	---	---	---	---	---	.5	.5	.5	.0	.0	.0
MONTH	18.0	12.0	14.5	13.0	5.5	9.5	6.5	.0	2.5	.5	.0	.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	.0	.0	.0	.5	.0	.0	2.0	1.5	1.5	1.5	1.0	1.0
2	.0	.0	.0	.5	.0	.0	1.5	1.5	1.5	1.5	1.0	1.5
3	.0	.0	.0	.0	.0	.0	1.5	1.5	1.5	1.5	1.0	1.0
4	.0	.0	.0	.0	.0	.0	2.0	1.5	1.5	1.5	1.0	1.0
5	.0	.0	.0	.0	.0	.0	2.0	1.5	2.0	1.5	1.0	1.0
6	.0	.0	.0	.5	.0	.0	2.0	1.5	1.5	1.0	.5	1.0
7	.0	.0	.0	.5	.0	.0	2.0	2.0	2.0	1.0	.5	1.0
8	.0	.0	.0	.5	.0	.5	2.0	1.5	1.5	1.0	.5	1.0
9	.0	.0	.0	.5	.0	.5	2.0	1.5	1.5	1.0	.5	.5
10	.0	.0	.0	.5	.5	.5	2.0	1.5	2.0	.5	.5	.5
11	.0	.0	.0	.5	.5	.5	2.0	1.5	2.0	1.0	.5	.5
12	.0	.0	.0	.5	.5	.5	2.0	1.5	1.5	1.0	1.0	1.0
13	.0	.0	.0	1.0	.5	.5	2.0	1.5	1.5	2.0	1.0	1.5
14	.0	.0	.0	1.0	.5	.5	1.5	1.5	1.5	3.0	1.5	2.5
15	.0	.0	.0	.5	.5	.5	1.5	1.5	1.5	4.5	3.0	3.5
16	.0	.0	.0	1.0	.5	.5	1.5	1.5	1.5	5.0	4.5	4.5
17	.0	.0	.0	1.0	.5	.5	2.0	1.5	1.5	5.0	4.5	5.0
18	.0	.0	.0	1.0	.5	.5	2.0	1.5	2.0	5.0	4.5	5.0
19	.0	.0	.0	1.0	1.0	1.0	2.0	1.5	2.0	5.5	4.5	5.0
20	.0	.0	.0	1.0	.5	1.0	1.5	1.5	1.5	7.0	5.0	5.5
21	.0	.0	.0	1.0	1.0	1.0	1.5	1.5	1.5	8.5	7.0	8.0
22	.0	.0	.0	1.0	1.0	1.0	2.0	1.5	1.5	8.5	8.0	8.5
23	.0	.0	.0	1.5	1.0	1.0	2.0	1.5	1.5	9.0	8.5	9.0
24	.0	.0	.0	1.0	1.0	1.0	2.0	1.5	2.0	9.0	9.0	9.0
25	.0	.0	.0	1.0	1.0	1.0	2.0	1.5	1.5	9.0	8.5	8.5
26	.0	.0	.0	1.0	1.0	1.0	2.0	1.5	2.0	10.0	8.5	9.0
27	.0	.0	.0	1.0	1.0	1.0	2.0	1.5	2.0	10.5	10.0	10.5
28	.5	.0	.0	1.0	1.0	1.0	2.0	1.5	1.5	12.5	10.5	11.5
29	---	---	---	1.5	1.0	1.0	2.0	1.5	1.5	14.0	12.5	13.0
30	---	---	---	1.5	1.0	1.5	1.5	1.0	1.5	15.5	13.5	14.5
31	---	---	---	1.5	1.5	1.5	---	---	---	16.0	14.5	15.0
MONTH	.5	.0	.0	1.5	.0	.5	2.0	1.0	1.5	16.0	.5	5.0

04219640 NIAGARA RIVER (LAKE ONTARIO) AT FORT NIAGARA, NY--Continued

TEMPERATURE(DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	19.5	16.0	17.0	20.5	20.0	20.5	22.0	22.0	22.0	22.5	22.0	22.0
2	19.5	18.0	18.5	20.0	20.0	20.0	22.5	22.0	22.5	22.5	22.0	22.0
3	18.5	18.0	18.0	20.0	19.0	19.5	22.5	22.5	22.5	22.0	22.0	22.0
4	18.0	17.5	17.5	19.5	18.5	19.0	22.5	22.0	22.0	22.0	21.5	21.5
5	18.0	17.5	17.5	20.0	19.0	19.5	22.5	22.0	22.0	22.0	21.5	21.5
6	18.0	18.0	18.0	20.0	20.0	20.0	22.5	22.5	22.5	22.0	21.5	22.0
7	18.0	18.0	18.0	20.5	20.0	20.5	22.5	22.0	22.0	22.0	21.5	21.5
8	18.5	18.0	18.0	21.0	20.5	20.5	22.5	22.0	22.0	21.5	21.0	21.5
9	18.0	18.0	18.0	21.0	20.5	21.0	22.0	22.0	22.0	21.5	21.0	21.0
10	18.0	17.5	18.0	21.0	20.5	21.0	22.5	22.0	22.0	21.0	20.5	21.0
11	18.5	18.0	18.5	21.0	20.5	20.5	23.0	23.0	23.0	21.5	21.0	21.0
12	19.0	18.0	18.5	20.5	20.0	20.5	23.5	23.0	23.0	21.5	20.5	21.0
13	19.0	16.0	16.5	20.5	20.0	20.5	23.5	23.0	23.0	20.5	19.5	20.0
14	16.0	15.5	16.0	21.0	20.5	20.5	23.5	23.5	23.5	20.0	19.5	19.5
15	16.0	15.0	15.5	21.5	21.0	21.0	24.0	23.5	23.5	20.0	20.0	20.0
16	16.0	15.5	16.0	21.5	21.0	21.0	24.0	23.5	24.0	20.0	19.5	20.0
17	16.5	16.0	16.5	21.5	21.0	21.5	24.0	23.5	23.5	19.5	19.0	19.0
18	17.0	16.5	16.5	21.5	21.0	21.0	24.0	23.0	23.5	19.0	19.0	19.0
19	17.5	17.0	17.0	21.5	21.0	21.0	24.0	23.5	24.0	19.0	18.5	19.0
20	18.0	17.5	17.5	22.0	21.5	21.5	24.0	23.0	23.5	21.0	19.0	19.0
21	18.0	18.0	18.0	22.5	22.0	22.0	23.5	23.0	23.0	19.5	19.5	19.5
22	18.0	17.5	18.0	23.5	22.5	23.0	25.0	23.0	23.0	19.5	19.0	19.0
23	18.0	17.5	18.0	23.5	23.0	23.5	23.0	22.5	23.0	19.0	18.5	18.5
24	18.0	18.0	18.0	23.0	23.0	23.0	23.0	23.0	23.0	18.5	18.5	18.5
25	18.5	18.0	18.0	23.0	22.5	23.0	23.0	22.5	22.5	18.5	18.0	18.5
26	19.0	18.5	18.5	23.5	23.0	23.5	23.0	22.5	22.5	18.5	17.5	18.0
27	19.5	18.5	19.0	23.5	23.0	23.0	23.0	22.5	22.5	18.0	17.5	18.0
28	20.0	19.0	19.5	23.5	23.0	23.0	22.5	22.5	22.5	18.0	17.5	17.5
29	20.5	19.5	20.0	23.0	22.0	22.5	22.5	22.5	22.5	17.5	17.0	17.0
30	20.5	20.5	20.5	22.0	22.0	22.0	22.5	22.5	22.5	17.5	17.0	17.0
31	---	---	---	22.0	22.0	22.0	22.5	22.0	22.5	---	---	---
MONTH	20.5	15.0	18.0	23.5	18.5	21.5	25.0	22.0	23.0	22.5	17.0	20.0

04219940 MANNING MUCKLAND CREEK NEAR BARRE CENTER, NY

LOCATION.--Lat 43°10'13", long 78°08'04", Orleans County, Hydrologic Unit 04130001, on left bank 40 ft (12.2 m) upstream from bridge on McNamar Road, 200 ft (60 m) east of Angevine Road, 1.5 mi (2.41 km) north of South Barre, and 3.2 mi (5.15 km) east of Barre Center.

DRAINAGE AREA.--5.28 mi² (13.68 km²).

PERIOD OF RECORD.--June 1974 to September 1976, October 1976 to September 1978 (no winter records) discontinued.

GAGE.--Water-stage recorder. Datum of gage is 639.38 ft (194.883 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except those for periods of no gage-height record, Mar. 1 to Apr. 6, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 100 ft³/s (2.83 m³/s) Mar. 23, 1978, gage height, about 6.8 ft (2.07 m); minimum, no flow many days in 1978.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 40 ft³/s (1.13 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 15	2045	47	1.33	4.91	1.497
Dec. 19	0400	73	2.07	5.94	1.811
Dec. 25	1030	46	1.30	4.89	1.490
Mar. 16	Unknown	a 60	1.70	Unknown	
Mar. 23	Unknown	*a100	2.83	*a6.8	2.073

No flow many days.

a About.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	4.2	21			4.6	47	4.8	1.2	.08	.03	.03
2	18	4.0	17			4.5	43	4.6	3.5	.07	.13	.01
3	21	3.9	13			4.4	30	4.4	2.5	.07	.46	.03
4	15	5.8	10			4.3	25	4.3	1.5	.10	1.0	.02
5	10	6.0	9.0			4.2	35	4.7	1.5	.08	.19	.00
6	8.9	5.4	8.1			4.1	24	5.4	1.4	.07	.07	.00
7	7.8	7.1	7.9			4.0	29	5.1	1.6	.06	.05	.00
8	7.4	8.1	7.8			4.2	21	4.9	4.1	.06	.05	.00
9	11	6.8	8.1			4.4	15	5.8	2.9	.06	.04	.00
10	11	11	7.7			4.6	13	5.0	2.2	.06	.05	.00
11	8.6	14	7.8			4.8	12	4.6	2.0	.04	.03	.00
12	8.0	14	8.2			5.0	13	4.6	1.9	.03	.01	.01
13	7.2	13	8.6			6.0	11	4.7	1.8	.03	.00	.03
14	6.6	12	21			12	9.1	5.4	1.6	.04	.00	.02
15	6.3	11	45			25	8.4	5.0	1.4	.03	.00	.01
16	6.3	12	45			48	7.6	4.6	1.2	.02	.01	.02
17	6.9	21	40			36	6.8	5.5	1.2	.02	.01	.03
18	6.7	22	51			32	6.3	5.0	1.1	.01	.00	.40
19	6.1	15	72			27	6.8	4.5	.99	.01	.00	1.7
20	5.7	12	60			27	10	4.1	.69	.01	.00	1.6
21	5.5	11	50			27	19	4.2	.58	.01	.00	.76
22	5.4	9.9	39			32	15	3.8	.76	.01	.00	.30
23	5.1	9.2	29			58	11	3.5	.50	.03	.00	.26
24	5.0	9.7	24			80	8.9	2.8	.46	.01	.00	.10
25	4.9	8.7	42			58	7.5	2.7	.32	.02	.00	.06
26	4.8	8.4	27			30	6.6	2.3	.40	.01	.00	.05
27	4.7	7.6	15			25	6.1	2.3	.28	.03	.00	.72
28	4.6	7.3	11			29	5.6	2.0	.52	.03	.07	.10
29	4.5	7.1	9.0			33	5.3	1.8	.55	.01	.05	.08
30	4.4	7.3	8.0			28	5.0	1.7	.17	.04	.02	.05
31	4.3	---	7.4			37	---	1.5	---	.02	.02	---
TOTAL	245.7	294.5	729.6			703.1	463.0	125.6	40.82	1.17	2.29	6.39
MEAN	7.93	9.82	23.5			22.7	15.4	4.05	1.36	.038	.074	.21
MAX	21	22	72			80	47	5.8	4.1	.10	1.0	1.7
MIN	4.3	3.9	7.4			4.0	5.0	1.5	.17	.01	.00	.00
CFSM	1.50	1.86	4.45			4.30	2.92	.77	.26	.007	.01	.04
IN.	1.73	2.07	5.14			4.95	3.26	.88	.29	.01	.02	.05

04219950 MANNING MUCKLAND CREEK TRIBUTARY NEAR ELBA, NY

LOCATION.--Lat 43°07'56", long 78°09'53", Genesee County, Hydrologic Unit 04130001, on left bank 125 ft (38 m) upstream from bridge on Oak Orchard Road, and 3.9 mi (6.28 km) north of Elba.

DRAINAGE AREA.--21.9 mi^2 (56.7 km^2).

PERIOD OF RECORD.--June 1974 to September 1976, October 1976 to September 1978 (no winter records) discontinued.

GAGE.--Water-stage recorder. Datum of gage is 621.31 ft (189.375 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 378 ft^3/s (10.7 m^3/s) Mar. 23, 1978, gage height, 8.49 ft (2.588 m); minimum 0.03 ft^3/s (0.001 m^3/s) Aug. 24, 1975, Sept. 15, 16, 1976; minimum gage height, 1.18 ft (0.360 m) Aug. 24, 1975.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 190 ft^3/s (5.38 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Dec. 15	1730	269	7.62	7.03	2.143	Mar. 16	1700	238	6.74	6.58	2.006
Dec. 18	2300	281	7.96	7.19	2.192	Mar. 23	2130	*378	10.7	*8.49	2.588
Dec. 25	1700	207	5.86	6.12	1.865						

Minimum daily discharge, 0.07 ft^3/s (0.002 m^3/s) July 21; minimum gage height, 1.23 ft (0.375 m) Aug. 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	81	7.2	86			25	206	9.5	5.9	2.4	.98	.98
2	116	7.0	77			24	190	9.1	5.5	2.2	.81	.58
3	117	6.8	52			24	129	8.9	5.1	2.1	.81	.45
4	92	14	39			23	109	8.2	5.1	3.0	1.6	.29
5	60	25	27			23	146	9.8	5.5	3.1	1.7	.29
6	42	17	26			22	102	15	5.3	2.5	.98	.29
7	30	19	25			22	136	13	6.4	2.2	.81	.21
8	22	49	24			23	98	11	18	1.7	.73	.21
9	32	36	23			25	69	12	13	1.4	.81	.18
10	46	35	24			27	56	13	8.9	1.3	.66	.21
11	33	73	25			29	52	10	7.2	1.2	.45	.29
12	29	69	35			31	56	9.8	6.7	.98	.35	2.2
13	30	57	45			32	48	11	6.4	.89	.25	5.9
14	24	46	150			67	37	14	6.2	.73	.18	4.1
15	20	40	250			160	30	15	6.0	.58	.21	2.5
16	18	46	227			210	25	12	6.0	.40	3.6	3.0
17	18	75	179			160	22	26	6.2	.21	1.7	5.9
18	18	107	188			140	20	25	6.2	.10	.98	13
19	16	62	281			120	20	22	6.2	.10	.73	38
20	15	42	253			120	32	14	6.2	.08	.98	33
21	13	33	214			120	97	15	6.0	.07	1.2	20
22	12	27	176			140	78	12	6.4	.15	.98	13
23	12	22	131			250	48	10	5.9	.15	.58	9.5
24	11	23	106			350	33	9.1	5.5	.18	.45	6.8
25	10	20	171			250	24	8.0	5.3	.25	.52	5.1
26	10	19	147			110	18	7.6	4.9	.21	.58	3.9
27	9.5	16	100			110	15	7.4	4.6	.25	.58	3.4
28	8.9	15	45			120	13	6.8	4.1	.98	.45	2.8
29	8.2	15	35			140	12	6.7	3.9	.73	.45	2.4
30	7.8	15	30			120	10	6.7	3.0	.52	.35	2.1
31	7.4	---	28			110	---	6.4	---	1.4	1.1	---
TOTAL	968.8	1038.0	3219			3127	1931	364.0	191.6	32.06	26.56	180.58
MEAN	31.3	34.6	104			101	64.4	11.7	6.39	1.03	.86	6.02
MAX	117	107	281			350	206	26	18	3.1	3.6	38
MIN	7.4	6.8	23			22	10	6.4	3.0	.07	.18	.18
CFSM	1.43	1.58	4.75			4.61	2.94	.53	.29	.05	.04	.28
IN.	1.65	1.76	5.47			5.31	3.28	.62	.33	.05	.05	.31

431607077385301 (042202528) LAKE ONTARIO NEAR ROCHESTER, NY

LOCATION.--Lat 43°16'07", long 77°38'53", Monroe County, Hydrologic Unit 04150200, at Shoremont filtration plant on Dewey Avenue, Rochester.

PERIOD OF RECORD.--Water years 1975 to current year.
CHEMICAL DATA: 1975 (a), 1976-78 (b).
MINOR ELEMENTS DATA: 1975 (a), 1976-78 (b).
RADIOLOGICAL DATA: 1975 (a), 1976-78 (b).
PESTICIDE DATA: 1975 (a), 1976-78 (b).
ORGANIC DATA: TOC--1975 (a), 1976 (b), 1977 (a), 1978 (b).
PCB--1975 (a), 1976 (b), 1977 (a), 1978 (b).
PCN--1975 (a), 1976 (b), 1977 (a), 1978 (b).

REMARKS.--Samples are collected from raw-water tap in filtration plant laboratory. Analyses are available in the files of the Geological Survey of treated-water samples collected at the Shoremont filtration plant.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)
NOV , 1977												
08...	1030	345	7.3	9.5	140	40	42	8.1	13	1.7	120	0
MAR , 1978												
23...	1000	360	7.5	4.0	140	49	42	8.4	14	2.1	110	0
JUN												
15...	1030	350	7.6	14.0	130	46	38	8.1	12	1.5	100	0
SEP												
14...	1100	360	7.0	9.5	140	50	43	8.0	13	1.6	110	0

DATE	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)
NOV , 1977												
08...	98	28	29	.1	.7	210	182	9	--	--	--	--
MAR , 1978												
23...	90	30	26	.1	.4	186	177	<1	.31	.00	.31	.01
JUN												
15...	82	30	25	.1	.1	197	164	<1	.26	.01	.27	.02
SEP												
14...	90	30	27	.1	.5	213	177	1	.38	.00	.38	.00

DATE	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO. TOTAL (MG/L AS P)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
NOV , 1977												
08...	--	--	--	--	--	220	1	0	0	10	0	5
MAR , 1978												
23...	.34	.35	.66	.03	.01	90	1	0	0	<10	0	5
JUN												
15...	.28	.30	.57	.02	.00	80	1	0	0	10	0	5
SEP												
14...	.46	.46	.84	.02	.01	60	1	0	1	<10	1	4

DATE	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LITHIUM TOTAL RECOVERABLE (UG/L AS LI)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	STRONTIUM, TOTAL RECOVERABLE (UG/L AS SR)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)
NOV , 1977											
08...	400	1	0	20	<.5	2	4	0	0	140	10
MAR , 1978											
23...	100	8	0	20	<.5	2	12	0	0	150	0
JUN											
15...	50	5	0	20	<.5	2	3	0	0	160	20
SEP											
14...	50	3	0	0	<.5	1	7	0	0	200	0

431607077385301 (042202528) LAKE ONTARIO NEAR ROCHESTER, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	CARBON, ORGANIC TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)	PCB, TOTAL (UG/L)	NAPHTHALENES, POLYCHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLORDANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)
NOV										
08...	9.0	--	--	.0	.00	.00	.0	.00	.00	.00
MAR										
23...	2.4	.00	.00	.0	.00	.00	.0	.00	.00	.00
JUN										
15...	1.0	.00	--	.0	.00	.00	.0	.00	.00	.00
SEP										
14...	1.7	.00	.00	.0	.00	.00	.0	.00	.00	.00

DATE	DIAZINON, TOTAL (UG/L)	DIELDRIN TOTAL (UG/L)	ENDOSULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	ETHION, TOTAL (UG/L)	HEPTACHLOR, TOTAL (UG/L)	HEPTACHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	MALATHION, TOTAL (UG/L)	METHOXYCHLOR, TOTAL (UG/L)
NOV										
08...	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
MAR										
23...	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
JUN										
15...	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
SEP										
14...	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

DATE	METHYL PARATHION, TOTAL (UG/L)	METHYL TRITHION, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	PARATHION, TOTAL (UG/L)	TOXAPHENE, TOTAL (UG/L)	TOTAL TRITHION (UG/L)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	SILVEX, TOTAL (UG/L)
NOV									
08...	.00	.00	.00	.00	0	.00	.00	.00	.00
MAR									
23...	.00	.00	.00	.00	0	.00	.00	.00	.00
JUN									
15...	.00	.00	.00	.00	0	.00	.01	.01	.00
SEP									
14...	.00	.00	.00	.00	0	.00	.00	.00	.00

DATE	GROSS ALPHA, DISSOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DISSOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DISSOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	RADIUM 226, DISSOLVED, RADON METHOD (PCI/L)	URANIUM DISSOLVED, EXTRACTION (UG/L)	STRONTIUM 90 DISSOLVED (PCI/L)
NOV									
08...	<2.2	<4.0	3.9	.6	3.5	.6	.14	.63	.6
MAR									
23...	<2.5	<.4	4.6	<.4	3.9	<.4	.07	--	.9
JUN									
15...	<1.6	<.4	3.8	<.4	3.6	<.4	.04	--	1.0
SEP									
14...	<1.5	<.4	3.8	<.4	3.6	<.4	.07	--	.9

04221000 GENESEE RIVER AT WELLSVILLE, NY

LOCATION.--Lat 42°07'20", long 77°57'27", Allegany County, Hydrologic Unit 04130002, on left bank 35 ft (11 m) upstream from concrete weir at Wellsville, 0.5 mi (0.8 km) upstream from bridge on State Highway 17, 0.6 mi (1.0 km) upstream from Crowner Brook and sewage treatment plant, and 0.6 mi (1.0 km) downstream from Dyke Creek.

DRAINAGE AREA.--289 mi^2 (749 km^2).

PERIOD OF RECORD.--August 1955 to September 1958, October 1972 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,470.00 ft (448.056 m) National Geodetic Vertical Datum of 1929. October 1957 to September 1958, nonrecording gage at site 0.4 mi (0.6 km) upstream at datum 3.00 ft (0.91 m) higher. August 1955 to September 1957, at same site at datum 8.00 ft (2.438 m) higher.

REMARKS.--Records good except those for winter periods, which are fair. Record for station 04221500 Genesee River at Scio, 5.2 mi (8.4 km) downstream, published for June 1916 to September 1972.

AVERAGE DISCHARGE.--9 years (1955-58, 1972-78), 442 ft^3/s (12.52 m^3/s), 20.77 in/yr (528 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,800 ft^3/s (447 m^3/s) Mar. 8, 1956, gage height, 12.65 ft (3.856 m) site and datum then in use, from graph based on gage readings; minimum daily, 18 ft^3/s (0.51 m^3/s Sept. 9, 1957.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since before June 1916, 38,500 ft^3/s (1,090 m^3/s) June 23, 1972, gage height, 20.7 ft (6.31 m) present datum, from floodmark, on basis of contracted-opening measurement of peak flow.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,600 ft^3/s (102 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Dec. 14	2100	4,900	139	8.84	2.694	Apr. 1	2200	4,720	134	8.73	2.661
Jan. 9	0400	3,820	108	8.15	2.484	Apr. 5	0300	3,940	112	8.23	2.509
Jan. 26	1630	ice jam		*11.10	3.383	May 14	1400	*6,600	187	9.79	2.984
Mar. 21	2330	6,200	176	9.58	2.920	May 17	0500	3,860	109	8.18	2.493
Mar. 23	2000	4,390	124	8.52	2.597						

Minimum discharge, 38 ft^3/s (1.08 m^3/s) Sept. 7, 8, gage height 4.32 ft (1.317 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DATA

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	885	235	1240	370	500	140	2880	292	211	70	66	68
2	912	223	682	320	460	140	3160	276	206	66	58	50
3	742	214	580	290	420	140	1760	248	206	66	78	48
4	609	326	500	290	360	150	1800	229	181	82	154	49
5	517	275	430	304	340	140	2990	458	166	73	72	45
6	502	244	500	282	330	140	1830	422	153	63	598	41
7	436	682	450	274	320	140	2050	330	139	58	415	39
8	391	988	410	569	310	130	1660	295	197	66	339	48
9	745	695	370	2430	290	130	1250	367	296	67	196	57
10	585	954	330	800	260	140	1040	390	177	59	195	64
11	451	1230	310	720	270	140	1020	319	141	55	145	82
12	430	822	350	600	250	160	1080	302	123	50	402	95
13	389	726	380	560	250	190	833	462	177	48	187	94
14	366	631	2280	480	240	620	699	4290	141	47	130	59
15	571	586	3770	410	210	2010	604	3350	113	48	107	51
16	556	575	1970	380	200	1230	541	1870	102	247	95	54
17	777	1370	1410	380	200	860	479	2800	96	252	83	54
18	841	1040	1540	520	180	700	425	1600	96	94	73	63
19	920	809	1400	490	170	660	450	1210	129	76	67	298
20	773	703	1100	440	160	721	832	952	135	64	79	131
21	689	646	1010	400	150	2530	991	1100	115	67	68	93
22	628	584	860	350	150	4150	752	756	146	99	59	91
23	576	521	748	310	160	3380	627	621	105	73	54	79
24	489	519	680	320	160	2770	568	619	88	74	51	69
25	437	452	1130	410	160	1650	512	524	79	62	49	63
26	401	434	620	1600	160	1310	462	434	74	58	48	58
27	370	381	500	1600	150	1420	422	377	114	82	45	55
28	339	363	470	1100	140	1370	381	333	217	68	48	53
29	304	333	460	800	---	1520	345	308	98	67	54	50
30	276	392	450	660	---	1290	320	265	80	118	48	49
31	253	---	420	580	---	1390	---	238	---	80	60	---
TOTAL	17160	17953	27350	19039	6950	31461	32763	26037	4301	2499	4123	2150
MEAN	554	598	882	614	248	1015	1092	840	143	80.6	133	71.7
MAX	920	1370	3770	2430	500	4150	3160	4290	296	252	598	298
MIN	253	214	310	274	140	130	320	229	74	47	45	39
CFSM	1.92	2.07	3.05	2.13	.86	3.51	3.78	2.91	.50	.28	.46	.25
IN.	2.21	2.31	3.52	2.45	.89	4.05	4.22	3.35	.55	.32	.53	.28

CAL YR 1977 TOTAL 212779 MEAN 583 MAX 5240 MIN 65 CFSM 2.02 IN 27.39
WTR YR 1978 TOTAL 191786 MEAN 525 MAX 4290 MIN 39 CFSM 1.82 IN 24.69

04221990 RUSHFORD LAKE AT CANEADEA DAM, NY

04221991 CANEADEA CREEK AT CANEADEA DAM, NY

LOCATION.--Lat 42°22'49", long 78°11'00", Allegany County, Hydrologic Unit 04130002, in control structure of Caneadea Dam at outlet of Rushford Lake, and 2.4 mi (3.9 km) upstream from mouth.

DRAINAGE AREA.--60.7 mi² (157 km²).

PERIOD OF RECORD.--October 1968 to current year. July 1928 to current year in files of Rochester Gas and Electric Corp.

GAGE.--Water-stage recorder. Elevation of gage is 1,440 ft (439 m) National Geodetic Vertical Datum of 1929 (furnished by Rochester Gas and Electric Corp.).

REMARKS.--Outflow from Rushford Lake (capacity, 1,106 mil ft³ or 31.3 hm³) used for power generation. Discharge computed by orifice and (or) weir formula. Flow regulated by gates at dam completed in 1928. Area of water surface, 0.89 mi² (2.31 km²). Daily discharge record at a site 2 miles (3.2 km) downstream is published for July 1949 to September 1968 as station 04222000 Caneadea Creek at Caneadea, NY.

AVERAGE DISCHARGE.--10 years, 96.2 ft³/s (2.72 m³/s), 21.52 in/yr (547 mm/yr), unadjusted.

MONTHEND ELEVATION, CONTENTS, AND MONTHLY DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCT. 1977 TO SEPT. 1978

	04221990 RUSHFORD LAKE			04221991 CANEADEA CREEK AT CANEADEA DAM			
	* Elevation FT	Contents FT³	Change in contents FT³/S	Observed discharge MEAN	† Adjusted for change in contents in Rushford Lake MEAN	CFSM	IN.
October	1,429.5	867.54	- 43.5	124	80.1	1.32	1.52
November	1,421.3	710.64	- 60.5	184	123	2.03	2.27
December	1,420.1	688.78	- 8.16	157	149	2.45	2.83
CAL YR 1977			+ 17.0	99.9	117	1.93	26.15
January	1,420.2	690.60	+ .68	49.8	50.5	.83	.96
February	1,419.9	685.32	- 2.18	6.00	3.82	.06	.07
March	1,421.6	716.08	+ 11.5	175	186	3.06	3.54
April	1,424.5	768.79	+ 20.3	209	229	3.77	4.21
May	1,439.5	1,094.00	+121	29.4	151	2.49	2.86
June	1,440.5	1,118.02	+ 9.27	2.47	11.7	.19	.22
July	1,440.6	1,120.44	+ .90	6.65	7.55	.12	.14
August	1,440.5	1,118.02	- .90	9.55	8.65	.14	.16
September	1,418.7	665.45	-175	191	16.1	.27	.30
WTR YR 1978			- 10.1	95.4	85.3	1.41	19.08

* Elevation at 2400 hours on last day of month.
† Adjustments by Geological Survey.

NOTE.--All figures of contents expressed in millions.

04223000 GENESEE RIVER AT PORTAGEVILLE, NY

LOCATION.--Lat 42°34'13", long 78°02'33", Wyoming County, Hydrologic Unit 04130002, on left bank at Portageville, 500 ft (152 m) downstream from bridge on State Highway 436,800 ft (244 m) upstream from abandoned railroad bridge piers, and 0.9 mi (1.4 km) upstream from Upper Falls.

DRAINAGE AREA.--981 mi² (2,541 km²).

PERIOD OF RECORD.--August 1908 to current year. Prior to December 1945, published as "at St. Helena". Records published for both sites December 1945 to September 1950.

REVISED RECORDS.--WSP 264: 1908. WSP 564: 1916(M). WSP 2112: Drainage area. WRD NY 1972: 1950(M), 1951(M), 1956(M), 1959(M), 1964(M), 1967(M).

GAGE.--Water-stage recorder. Datum of gage is 1,080.00 ft (329.184 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to Aug. 24, 1911, nonrecording gage and Aug. 24, 1911 to Sept. 30, 1946, water-stage recorder at site 8 mi (13 km) downstream at different datum. Oct. 1, 1946 to June 21, 1972, water-stage recorder at site 1,200 ft (366 m) downstream at datum 2.60 ft (0.792 m) higher (destroyed by flood of June 1972). July 12, 1972 to May 18, 1973, nonrecording gage at site 500 ft (152 m) upstream at datum 11.48 ft (3.499 m) higher.

REMARKS.--Records fair except those for winter period, which are poor. Since July 1928, some seasonal regulation by Rushford Lake. Diurnal fluctuation at low flow caused by powerplant. Monthly figures of discharge and runoff 1952 to 1966 water years adjusted for change in contents in Rushford Lake.

AVERAGE DISCHARGE.--70 years, 1,256 ft³/s (35.57 m³/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 90,000 ft³/s (2,550 m³/s) June 23, 1972, gage height, 35.25 ft (10.744 m) site and datum then in use, from high-water mark, from rating curve extended above 25,000 ft³/s (708 m³/s) on basis of contracted-opening measurement of 71,000 ft³/s (2,010 m³/s) at highway bridge 0.4 mi (0.6 km) upstream and contracted-opening measurement of 98,200 ft³/s (2,780 m³/s) 0.7 mi (1.1 km) downstream from gage; minimum, 18 ft³/s (0.51 m³/s) Oct. 5, 17, 1913, gage height, 1.70 ft (0.518 m) site and datum then in use.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 15,000 ft³/s (425 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 15	0200	18,600	527	16.72	5.096	Apr. 5	0700	*24,600	697	*18.78	5.724
Mar. 22	0530	21,600	612	17.72	5.401	May 14	2230	22,200	629	17.94	5.468
Apr. 2	0130	17,200	487	16.22	4.944						

Minimum discharge, 124 ft³/s (3.51 m³/s) Sept. 7, 8, gage height, 8.21 ft (2.502 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3320	760	5720	1100	2100	500	10900	801	511	238	239	162
2	4310	720	3850	1000	1900	500	12600	762	477	214	186	157
3	3190	700	2420	940	1700	490	6880	716	540	200	155	153
4	2700	900	2060	900	1600	490	6800	654	491	200	179	148
5	2060	1260	1700	860	1500	480	18300	1310	439	230	244	145
6	1500	1100	1700	840	1400	470	8000	2350	411	230	206	134
7	1200	1730	2110	820	1300	460	8660	1460	389	209	569	127
8	1100	4150	1880	880	1300	450	6980	1050	498	192	483	137
9	2740	2820	1700	9130	1200	500	4570	1210	614	179	411	147
10	3640	2660	1600	3600	1200	490	3680	2150	638	197	369	150
11	2080	5360	1500	2000	1100	480	3520	1300	439	167	329	154
12	1200	2850	1400	1800	1100	470	4570	970	367	178	300	245
13	1100	2420	1500	1700	1000	600	3440	1310	367	171	480	239
14	1000	2040	7400	1600	940	1300	2680	11100	433	166	309	222
15	1400	1910	14600	1500	880	8600	2150	12300	361	166	248	185
16	1600	2840	6700	1400	840	6600	1830	5530	317	161	217	197
17	1990	4000	4910	1300	820	4600	1590	8550	308	249	203	223
18	2740	5840	6520	1100	780	3700	1440	5770	308	324	193	321
19	3130	4070	7580	1100	740	3400	1310	3660	351	219	178	863
20	2400	3030	4950	1000	700	3300	1810	2700	547	187	193	961
21	1930	3300	4040	980	680	6200	4480	3090	394	178	193	743
22	1700	3240	3420	960	660	17300	3320	2480	405	194	188	675
23	1600	2290	2610	900	620	12600	2800	1710	378	197	164	649
24	1400	2060	2310	840	620	11600	1940	1430	313	188	155	626
25	1200	1880	3940	820	640	6930	1560	1310	272	174	152	599
26	1100	1700	2820	1400	580	5000	1360	1030	250	167	143	584
27	1000	1500	1600	7000	540	5960	1190	871	250	186	140	579
28	940	1400	1500	5200	520	5790	1050	762	277	243	141	588
29	860	1300	1500	3700	---	6930	936	679	367	218	153	552
30	820	1200	1400	3000	---	5230	860	614	277	212	154	232
31	800	---	1300	2400	---	5770	---	568	---	260	156	---
TOTAL	57750	71070	108240	61770	28960	127190	131206	80197	11984	6314	7430	10897
MEAN	1863	2369	3492	1993	1034	4103	4374	2587	400	204	240	363
MAX	4310	5840	14600	9130	2100	17300	18300	12300	638	324	569	961
MIN	800	700	1300	820	520	450	860	568	250	161	140	127

CAL YR 1977 TOTAL 801533 MEAN 2196 MAX 20700 MIN 198
WTR YR 1978 TOTAL 703013 MEAN 1926 MAX 18300 MIN 127

04224000 MOUNT MORRIS LAKE NEAR MOUNT MORRIS, NY

LOCATION.--Lat 42°44'00", long 77°54'40", Livingston County, Hydrologic Unit 04130002, at Mount Morris Dam on Genesee River, 2.0 mi (3.2 km) northwest of Mount Morris, 5 mi (8 km) upstream from Canaseraga Creek, and 40 mi (64 km) upstream from mouth.

DRAINAGE AREA.--1,075 mi^2 (2,784 km^2).

PERIOD OF RECORD.--January 1952 to current year. Prior to October 1970, published as "Mount Morris Reservoir near Mount Morris."

REVISED RECORDS.--WSP 1437: 1955. WSP 2112: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to Apr. 8, 1952, reference point at same site and datum.

REMARKS.--Lake is formed by a concrete gravity-type dam with overflow spillway, completed by Corps of Engineers in 1951 for flood control; first used for flood regulation on Nov. 24, 1951. Usable capacity, 336,800 acre-ft (415 hm^3) between elevation 585.0 ft (178.31 m), sill of conduits, and 760.0 ft (231.65 m), crest of spillway. Dead storage, 609 acre-ft (751,000 m^3). Discharge is controlled by the operation of nine gates. Water is stored during high flows and released when downstream conditions warrant.

COOPERATION.--Records furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 755.46 ft (230.264 m) June 25, 1972, contents, 322,600 acre-ft (398 hm^3); minimum, 584.23 ft (178.073 m) Sept. 2, 1976, contents, 475.8 acre-ft (587,000 m^3).

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 722.76 ft (220.297 m) Apr. 8, contents, 225,100 acre-ft (278 hm^3); minimum, 585.02 ft (178.314 m) Aug. 29, contents, 612.5 acre-ft (755,200 m^3).

Capacity table (elevation, in feet, and usable contents, in acre-feet)
(Furnished by Corps of Engineers in 1953)

584.00	436	600.00	5,610	640.00	43,700
586.00	782	605.00	8,250	660.00	78,200
588.00	1,210	610.00	11,600	680.00	119,800
590.00	1,730	620.00	19,800	700.00	166,300
595.00	3,410	630.00	30,500	730.00	245,200
				750.00	305,100

ELEVATION, IN FEET ABOVE NGVD, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	687.28	588.30	600.84	636.13	629.75	589.21	688.30	609.89	601.00	598.41	589.10	586.05
2	687.62	588.21	612.02	629.25	622.93	589.16	694.54	603.27	594.00	596.86	588.78	585.92
3	686.08	588.17	606.91	621.88	614.36	589.12	699.07	594.28	591.80	596.82	588.45	585.82
4	683.05	588.15	596.78	613.69	600.03	589.07	701.19	592.88	592.10	596.45	588.19	585.75
5	678.19	588.15	593.10	603.56	594.79	589.02	709.91	593.66	591.40	596.43	590.12	585.68
6	672.68	588.20	591.55	593.49	594.02	588.96	717.59	602.18	590.95	598.84	593.32	585.62
7	667.13	588.50	594.11	594.18	593.94	590.95	720.86	602.81	590.75	599.54	598.71	585.58
8	662.94	593.97	593.82	601.31	593.96	592.40	722.41	598.39	591.00	599.14	603.63	585.53
9	659.72	592.75	593.34	617.29	592.75	592.37	720.00	595.12	593.30	598.42	597.58	585.50
10	658.46	591.34	591.19	630.76	590.66	592.32	716.57	600.33	593.70	598.19	590.06	585.48
11	655.74	598.29	590.61	632.36	590.76	592.40	715.23	600.70	591.90	598.49	589.81	585.47
12	650.89	592.67	590.48	633.29	590.86	593.02	712.53	595.50	591.20	598.57	589.49	585.46
13	644.30	592.03	593.06	634.18	591.00	593.16	708.04	595.11	594.90	598.50	589.28	585.52
14	637.04	596.12	603.47	634.92	590.82	596.44	702.73	606.67	596.70	598.25	589.01	585.58
15	630.01	600.37	638.35	635.77	590.40	616.76	697.11	639.18	598.30	597.97	588.79	585.60
16	623.46	602.47	650.34	636.62	590.14	633.97	691.28	647.19	599.20	598.51	588.66	585.59
17	617.61	604.67	654.81	637.39	590.17	638.60	685.16	651.78	598.80	598.97	588.53	585.59
18	613.34	614.86	658.45	638.11	590.21	639.57	678.78	657.89	598.60	599.26	588.36	585.62
19	608.99	620.59	666.06	638.56	589.90	639.26	673.48	660.13	598.00	598.02	588.22	585.77
20	604.05	623.27	671.41	638.95	589.93	637.36	668.47	660.27	599.20	598.24	588.15	585.98
21	597.23	626.39	674.69	638.10	589.95	633.47	666.03	659.22	601.70	598.18	588.08	586.19
22	593.53	629.51	676.13	636.23	589.93	650.60	663.67	658.36	604.51	598.14	587.96	586.35
23	589.94	627.42	675.35	634.31	589.75	665.28	659.19	655.78	606.69	598.17	587.84	586.51
24	589.51	622.31	673.28	632.25	589.56	676.73	653.95	651.99	606.51	598.22	587.72	586.64
25	589.45	616.19	671.41	629.38	589.45	683.23	648.16	647.75	604.00	598.09	586.69	586.75
26	589.21	607.92	669.84	626.65	589.37	686.23	641.91	642.55	601.30	597.69	585.78	586.86
27	589.02	596.10	665.50	630.06	589.31	687.10	635.31	636.59	598.00	597.37	585.53	586.97
28	588.85	592.73	659.97	635.56	589.26	688.01	628.95	630.18	596.80	595.54	585.29	588.93
29	588.70	592.48	654.18	636.91	---	689.13	622.85	623.54	598.60	590.32	585.62	598.14
30	588.57	592.30	648.38	636.36	---	689.44	616.73	615.68	600.17	589.62	586.36	599.90
31	588.43	---	642.50	633.87	---	688.30	---	607.01	---	589.38	586.20	---
MEAN	629.71	601.48	632.32	628.11	594.57	629.70	682.00	623.74	597.17	597.25	589.33	586.88
MAX	687.62	629.51	676.13	638.95	629.75	689.44	722.41	660.27	606.69	599.54	603.63	599.90
MIN	588.43	588.15	590.48	593.49	589.26	588.96	616.73	592.88	590.75	589.38	585.29	585.46
†	1,301	2,432	42,930	32,890	1,532	136,300	14,060	7,144	5,389	1,532	807.9	4,972
‡	-2,180	+19.0	+659	-163	-565	+2,190	-2,050	-112	-29.5	-62.7	-11.8	+70.0

CAL YR 1977 MEAN 612.30 MAX 695.00 MIN 586.67 ‡ + 52.6
WTR YR 1978 MEAN 616.19 MAX 722.41 MIN 585.29 ‡ - 180

† Contents, in acre-feet, at end of month.
‡ Change in contents, equivalent in cubic feet per second.

04224775 CANASERAGA CREEK ABOVE DANSVILLE, NY

LOCATION.--Lat 42°32'08", long 77°42'16", Livingston County, Hydrologic Unit 04130002, on right bank on Poags Hole Road, 0.7 mi (1.1 km) upstream from Stony Brook, and 1.7 mi (2.7 km) south of Dansville.

DRAINAGE AREA.--90.0 mi² (233 km²).

PERIOD OF RECORD.--August 1974 to current year.

GAGE.--Water-stage recorder. Datum of gage is 715.60 ft (218.115 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,870 ft³/s (81.3 m³/s) Sept. 20, 1977, gage height, 5.51 ft (1.679 m); minimum, 7.4 ft³/s (0.21 m³/s) Sept. 11, 1975; minimum gage height, 0.98 ft (0.299 m) Sept. 6, 7, 8, 15, 16, 1978.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,000 ft³/s (28.3 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 15	0445	1,130	32.0	3.65	1.113	Apr. 1	1845	1,220	34.6	3.74	1.140
Dec. 18	1530	1,060	30.0	3.56	1.085	Apr. 5	0115	*2,190	62.0	*4.81	1.466
Mar. 21	2200	1,690	47.9	4.30	1.311						

Minimum discharge, 11 ft³/s (0.31 m³/s) Sept. 6, 7, 8, 11, 15, 16, gage height, 0.98 ft (0.299 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	253	58	340	90	100	42	812	80	46	25	21	13
2	282	57	181	84	96	41	661	76	46	23	19	12
3	286	55	139	78	92	40	334	69	50	23	18	12
4	223	71	123	74	90	40	613	64	43	25	18	12
5	164	74	96	70	88	40	1380	123	41	23	17	12
6	134	66	120	64	86	40	573	134	39	22	17	11
7	115	227	110	64	84	40	590	96	38	21	17	11
8	108	375	96	100	82	41	413	84	99	22	17	13
9	258	211	92	443	80	42	272	110	92	26	20	12
10	240	334	88	140	78	43	223	154	54	22	50	12
11	154	407	86	120	74	44	227	101	42	20	22	11
12	134	244	90	110	72	45	262	88	37	18	19	13
13	110	211	110	100	70	48	192	96	52	16	17	14
14	99	177	540	90	66	52	164	649	42	16	15	13
15	136	167	921	84	64	600	139	449	36	16	15	11
16	118	215	528	84	60	620	125	249	32	16	14	14
17	249	329	357	82	58	300	115	567	31	15	14	17
18	292	407	637	80	56	174	105	297	30	15	13	23
19	302	323	649	78	52	154	108	277	68	15	13	25
20	231	244	443	78	49	157	211	174	51	14	14	20
21	170	231	351	82	48	673	369	207	41	16	13	17
22	142	207	287	80	47	968	292	145	47	17	13	16
23	118	167	227	80	46	777	258	115	35	15	12	15
24	101	154	195	90	45	619	195	101	30	14	12	14
25	92	134	287	110	45	357	157	88	26	14	13	13
26	86	125	161	250	44	287	136	76	26	16	13	13
27	80	101	130	375	44	381	118	68	26	20	12	12
28	74	96	110	262	43	357	105	61	50	21	12	12
29	69	92	110	192	---	388	94	57	34	19	17	12
30	64	94	100	150	---	277	86	52	27	20	15	12
31	61	---	96	120	---	318	---	48	---	21	14	---
TOTAL	4945	5653	7800	3904	1859	8005	9329	4955	1313	586	516	417
MEAN	160	188	252	126	66.4	258	311	160	43.8	18.9	16.6	13.9
MAX	302	407	921	443	100	968	1380	649	99	26	50	25
MIN	61	55	86	64	43	40	86	48	26	14	12	11
CFSM	1.78	2.09	2.80	1.40	.74	2.87	3.46	1.78	.49	.21	.18	.15
IN.	2.04	2.34	3.22	1.61	.77	3.31	3.86	2.05	.54	.24	.21	.17

CAL YR 1977 TOTAL 53142 MEAN 146 MAX 1980 MIN 18 CFSM 1.62 IN 21.97
WTR YR 1978 TOTAL 49282 MEAN 135 MAX 1380 MIN 11 CFSM 1.50 IN 20.37

04227000 CANASERAGA CREEK AT SHAKERS CROSSING, NY

LOCATION.--Lat 42°44'13", long 77°50'26", Livingston County, Hydrologic Unit 04130002, on left bank 30 ft (9 m) upstream from bridge on State Highway 408 at Shakers Crossing, 1.3 mi (2.1 km) upstream from mouth, and 1.5 mi (2.4 km) northeast of Mount Morris.

DRAINAGE AREA.--333 mi² (862 km²).

PERIOD OF RECORD.--July 1915 to September 1922 (gage height only), November 1958 to September 1970, October 1974 to current year.

GAGE.--Water-stage recorder. Datum of gage is 545.52 ft (166.274 m) National Geodetic Vertical Datum of 1929. Prior to October 1974, at site 30 ft (9 m) downstream at same datum. Prior to November 1958, at site 40 ft (12 m) downstream at datum 5.52 ft (1.682 m) lower. April 1968 to September 1970, and since October 1974, auxiliary water-stage recorder 0.6 mi (1.0 km) downstream from base gage.

REMARKS.--Records fair except those for winter periods and those for period of no gage-height record, Mar. 15 to Apr. 19, which are poor.

AVERAGE DISCHARGE.--15 years (1959-70, 1975-78), 293 ft³/s (8.298 m³/s), 11.95 in/yr (304 mm/yr).

EXTREMES FOR PERIODS OF RECORD.--Maximum discharge, 5,270 ft³/s (149 m³/s) Mar. 4, 1976, gage height, 13.33 ft (4.063 m); maximum gage height, 23.62 ft (7.199 m) present datum, May 17, 1916 (backwater from Genesee River); minimum discharge, 4.3 ft³/s (0.12 m³/s) Aug. 19, 1970, gage height, 2.26 ft (0.689 m), result of temporary regulation.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,000 ft³/s (85.0 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 15	1230	3,480	98.6	11.26	3.432
Dec. 18	2030	3,460	98.0	11.23	3.423
Mar. 22	0345	3,430	97.1	11.19	3.411
Apr. 2	0800	3,280	92.9	11.01	3.356
Apr. 5	0130	*3,890	110	*11.77	3.588
Apr. 9	1215	--	--	a10.86	3.310
Apr. 13	1400	--	--	a11.51	3.508

a Backwater from Genesee River.

Minimum discharge, 32 ft³/s (0.91 m³/s) Sept. 7, gage height, 2.45 ft (0.747 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1200	214	1030	270	340	160	2170	249	149	82	70	41
2	1610	208	726	260	330	160	2780	251	140	80	63	37
3	1200	204	501	250	320	150	1080	230	150	78	58	35
4	821	232	471	240	310	150	1070	211	137	88	67	47
5	704	282	356	230	300	150	3110	306	129	87	58	39
6	638	250	313	220	290	150	1870	456	125	79	57	37
7	704	577	423	220	290	150	1930	333	118	73	61	33
8	467	1320	380	340	280	160	1600	291	155	70	62	36
9	755	778	300	1390	280	160	1100	325	288	86	57	45
10	921	876	290	387	270	160	900	438	165	75	120	37
11	498	1840	280	370	260	160	900	328	132	68	84	37
12	350	891	300	350	250	170	1100	276	116	64	64	52
13	322	678	370	330	240	170	800	304	156	67	56	60
14	389	568	1110	310	230	180	680	1030	150	64	52	43
15	456	531	2900	290	220	2100	560	1260	114	65	49	37
16	405	625	2500	280	210	2200	500	647	105	57	48	46
17	894	746	1610	270	200	1200	460	1330	103	60	50	60
18	979	1630	2250	250	190	640	400	831	114	55	46	85
19	901	1160	2810	250	190	560	350	660	158	51	43	137
20	803	778	1840	250	160	540	604	476	188	49	58	80
21	537	647	1300	270	180	1800	1450	574	127	53	48	60
22	454	597	1000	260	180	3080	997	434	150	121	42	53
23	406	536	800	260	170	2680	885	327	117	66	40	50
24	372	500	700	270	170	2260	557	282	102	58	39	46
25	313	450	1060	310	170	1440	420	256	96	55	43	43
26	292	592	560	1080	170	1140	436	197	92	57	43	41
27	277	355	470	2050	160	1660	376	136	90	68	41	40
28	264	327	420	1500	160	1420	271	155	135	115	40	36
29	249	325	380	1050	---	1540	265	155	112	80	46	38
30	237	356	330	560	---	1100	259	181	90	71	49	37
31	227	---	290	420	---	1200	---	148	---	69	41	---
TOTAL	18645	19073	28072	14787	6540	28790	29880	13077	4003	2211	1695	1466
MEAN	601	636	906	477	234	929	996	422	133	71.3	54.7	48.9
MAX	1610	1840	2900	2050	340	3080	3110	1330	288	121	120	137
MIN	227	204	280	220	160	150	259	136	90	49	39	33
CFSM	1.81	1.91	2.72	1.43	.70	2.79	2.99	1.27	.40	.21	.16	.15
IN.	2.08	2.13	3.14	1.65	.73	3.22	3.34	1.46	.45	.25	.19	.16

CAL YR 1977 TOTAL 180358 MEAN 494 MAX 3760 MIN 60 CFSM 1.48 IN 20.15
WTR YR 1978 TOTAL 168241 MEAN 461 MAX 3110 MIN 33 CFSM 1.38 IN 18.79

04227500 GENESEE RIVER NEAR MOUNT MORRIS, NY

LOCATION.--Lat 42°46'00", long 77°50'21", Livingston County, Hydrologic Unit 04130002, on right bank 100 ft (30 m) north of Jones Bridge Road, 0.8 mi (1.3 km) downstream from Canaseraga Creek, and 2.8 mi (4.5 km) northeast of Mount Morris.

DRAINAGE AREA.--1,417 mi^2 (3,670 km^2).

PERIOD OF RECORD.--May 1903 to April 1906, August 1908 to April 1914, July 1915 to current year. Prior to 1968, published as "at Jones Bridge."

REVISED RECORDS.--WSP 1277: 1952. WSP 1387: 1913. WSP 1437: 1955. WSP 2112: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 540.12 ft (164.629 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 11, 1915, nonrecording gage on bridge at datum 2.85 ft (0.869 m) lower.

REMARKS.--Records good except those for winter periods, which are poor. Diurnal fluctuation at low flow caused by powerplant. Flow regulated to some extent by Rushford Lake (see station 04221991) since July 1928, and at high flows since November 1951 by Mount Morris Lake (see station 04224000). Monthly figures of discharge and runoff 1952 to 1966 water years adjusted for change in contents in Rushford Lake and Mount Morris Lake.

AVERAGE DISCHARGE.--68 years (1908-13, 1915-78), 1,659 ft^3/s (46.98 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 55,100 ft^3/s (1,560 m^3/s) May 17, 1916, gage height, 25.44 ft (7.754 m); minimum, 12 ft^3/s (0.34 m^3/s) July 23, 1955, gage height, 0.22 ft (0.067 m), partially obstructed intake; minimum daily, 30 ft^3/s (0.85 m^3/s) Aug. 8, 1909.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 10,300 ft^3/s (292 m^3/s) Apr. 13, gage height, 15.36 ft (4.682 m); minimum, 115 ft^3/s (3.26 m^3/s) Aug. 7, gage height, 1.49 ft (0.454 m), result of regulation.

REVISIONS.--The maximum and minimum gage height for some water years have been revised, as shown in the following table. They supersede figures published in the reports for 1974-77.

Water year	Maximum Date	Maximum Gage height (ft)	Maximum Gage height (m)	Minimum Date	Minimum Gage height (ft)	Minimum Gage height (m)
1974	Apr. 12, 1974	12.20	3.719	Oct. 4, 5, 1973	1.19	0.363
1975	Jan. 13, 1975	11.98	3.652	Aug. 22, 1975	1.23	.375
1976	Mar. 10, 1976	a15.90	4.846	Sept. 26, 1976	1.13	.344
	Mar. 14, 1976	14.76	4.499			
1977	Sept. 19, 1977	15.17	4.624	June 5, 1977	1.96	.597

a Ice jam.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4300	1270	3940	4800	3600	680	7800	2820	1580	467	368	189
2	6630	1580	5060	4400	3800	660	7960	2310	784	352	284	184
3	7170	1590	4510	4000	3600	640	3630	1440	778	323	235	184
4	7960	1330	3350	3200	3200	640	4360	1060	803	331	220	187
5	8970	1460	2200	2300	2400	640	6170	1230	696	288	266	176
6	8750	1270	1700	1500	1800	640	4690	2320	637	217	232	171
7	8120	1790	1900	1300	1600	620	5620	2260	597	315	144	159
8	5970	5240	2200	1200	1600	600	7650	2020	637	315	347	164
9	5490	4090	2100	2800	1800	620	9550	1570	1040	323	1270	184
10	6170	3060	1900	1800	1600	640	8570	2160	951	263	529	176
11	6280	7260	1600	2100	1500	680	5660	2170	746	255	458	176
12	7040	4340	2000	2200	1500	720	8790	1680	554	273	390	241
13	7920	3320	2300	2500	1500	980	10200	1570	519	255	505	331
14	7200	2650	3000	2300	1500	2000	10100	2660	539	255	430	270
15	6120	2630	4800	1900	1400	4600	9870	2950	514	232	343	241
16	5060	3040	4000	1700	1300	5600	9570	2470	505	203	296	238
17	4740	3640	3200	1600	1300	5000	9570	3240	495	212	270	288
18	4770	5320	3900	1500	1200	4200	9130	2840	500	444	245	335
19	4800	4300	4500	1500	1100	3500	7670	3120	534	356	235	891
20	4160	2810	2700	1600	1000	3800	7360	3780	580	248	255	1080
21	3050	2040	2900	1700	900	4000	6910	4200	490	248	235	891
22	2350	3050	4000	2100	900	4510	7380	4220	192	323	232	784
23	2100	4880	5000	2400	800	4070	8200	5210	412	266	215	734
24	1880	4980	5600	2300	780	3220	7840	5510	481	255	192	703
25	1680	4600	6000	2400	760	2910	7430	5710	1040	252	189	672
26	1540	4060	6400	2800	740	3500	7220	5910	444	252	187	649
27	1440	2740	6200	3300	720	5880	6310	5600	678	270	176	637
28	1340	1860	6000	4200	700	5640	5180	5130	435	481	174	597
29	1390	1790	5800	4000	---	6040	4250	4270	360	368	181	421
30	1340	1790	5600	3700	---	6580	3470	3710	421	303	192	448
31	1290	---	5200	3500	---	7250	---	2700	---	303	187	---
TOTAL	147020	93780	119560	78600	44600	91060	218110	97840	18942	9248	9482	12401
MEAN	4743	3126	3857	2535	1593	2937	7270	3156	631	298	306	413
MAX	8970	7260	6400	4800	3800	7250	10200	5910	1580	481	1270	1080
MIN	1290	1270	1600	1200	700	600	3470	1060	192	203	144	159

CAL YR 1977 TOTAL 991914 MEAN 2718 MAX 9520 MIN 321
WTR YR 1978 TOTAL 940643 MEAN 2577 MAX 10200 MIN 144

04227980 CONESUS LAKE NEAR LAKEVILLE, NY

LOCATION.--Lat 42°47'39", long 77°43'15", Livingston County, Hydrologic Unit 04130003, on west shore of Conesus Lake at Geneseo Water Works pumping station, 300 ft (91 m) east of State Highway 256, and 3.0 mi (4.8 km) south of Lakeville.

DRAINAGE AREA.--69.7 mi^2 (181 km^2).

PERIOD OF RECORD.--July 1963 to current year. Since 1930 in files of village of Geneseo.

REVISED RECORDS.--WSP 2112: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Oct. 1, 1970 to Sept. 30, 1975, at datum 800.00 ft (243.840 m) higher. Prior to Oct. 1, 1970, nonrecording gage at site 200 ft (61 m) downstream at datum 796.59 ft (242.801 m) higher.

REMARKS.--Lake level maintained by plank and pile dam at outlet. Area of water surface, 5.08 mi^2 (13.2 km^2). Daily average of about 2 ft^3/s (0.057 m^3/s) diverted from lake for water supply for Avon, Geneseo, and Lakeville Water District.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 822.50 ft (250.698 m) June 24, 1972; minimum observed, 816.33 ft (248.817 m) present datum, Nov. 3-8, 1963.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 821.25 ft (250.317 m) Oct. 3; minimum, 816.74 ft (248.942 m) Sept. 15.

ELEVATION, IN FEET ABOVE NGVD, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	821.11	819.29	819.20	819.81	819.23	818.36	820.05	819.01	818.16	817.31	817.08	816.86
2	821.22	819.22	819.21	819.74	819.20	818.33	820.06	818.94	818.12	817.28	817.07	816.85
3	821.24	819.16	819.21	819.66	819.18	818.31	820.03	818.88	818.07	817.27	817.07	816.87
4	821.19	819.13	819.20	819.58	819.14	818.29	820.00	818.82	818.02	817.28	817.07	816.84
5	821.09	819.12	819.19	819.51	819.10	818.26	820.12	818.80	817.96	817.28	817.06	816.84
6	820.98	819.09	819.22	819.44	819.08	818.24	820.13	818.80	817.92	817.27	817.06	816.84
7	820.86	819.09	819.18	819.37	819.08	818.21	820.17	818.77	817.88	817.26	817.06	816.83
8	820.75	819.12	819.14	819.35	819.05	818.19	820.15	818.74	817.87	817.26	817.05	816.83
9	820.71	819.14	819.09	819.49	819.01	818.16	820.10	818.72	817.84	817.25	817.04	816.82
10	820.70	819.17	819.05	819.50	818.97	818.14	820.02	818.71	817.80	817.24	817.02	816.80
11	820.65	819.27	819.01	819.46	818.93	818.12	819.95	818.67	817.76	817.21	817.01	816.79
12	820.55	819.30	818.97	819.41	818.89	818.11	819.88	818.64	817.75	817.19	817.00	816.83
13	820.43	819.31	818.95	819.37	818.85	818.09	819.80	818.62	817.72	817.18	816.99	816.82
14	820.34	819.30	819.13	819.34	818.82	818.17	819.73	818.61	817.66	817.17	816.98	816.79
15	820.24	819.28	819.69	819.30	818.79	818.58	819.64	818.59	817.61	817.16	816.98	816.76
16	820.14	819.27	819.92	819.25	818.75	818.81	819.57	818.57	817.58	817.15	817.00	816.85
17	820.21	819.29	819.99	819.21	818.72	818.93	819.49	818.61	817.55	817.14	817.02	816.89
18	820.25	819.41	820.11	819.24	818.68	818.98	819.42	818.60	817.54	817.13	817.00	816.96
19	820.26	819.47	820.47	819.19	818.65	819.00	819.36	818.59	817.55	817.11	816.99	817.02
20	820.20	819.49	820.56	819.16	818.62	819.02	819.35	818.57	817.54	817.10	817.01	817.02
21	820.11	819.48	820.56	819.15	818.58	819.16	819.43	818.57	817.54	817.11	816.99	817.03
22	820.04	819.46	820.57	819.10	818.55	819.50	819.45	818.55	817.53	817.12	816.97	817.01
23	819.97	819.44	820.50	819.05	818.52	819.74	819.46	818.51	817.51	817.12	816.96	817.00
24	819.89	819.41	820.43	819.01	818.49	819.92	819.44	818.48	817.47	817.10	816.95	817.01
25	819.82	819.37	820.39	818.97	818.46	819.97	819.40	818.45	817.44	817.10	816.94	816.98
26	819.74	819.33	820.34	819.05	818.44	819.98	819.34	818.41	817.42	817.09	816.92	816.96
27	819.68	819.28	820.26	819.16	818.41	820.07	819.28	818.38	817.41	817.12	816.91	816.94
28	819.61	819.23	820.16	819.21	818.38	820.11	819.22	818.34	817.39	817.13	816.90	816.94
29	819.54	819.18	820.06	819.24	---	820.11	819.15	818.30	817.37	817.12	816.89	816.88
30	819.48	819.14	819.97	819.25	---	820.09	819.08	818.26	817.34	817.11	816.88	816.87
31	819.40	---	819.88	819.25	---	820.05	---	818.21	---	817.09	816.88	---
MEAN	820.34	819.27	819.73	819.32	818.81	818.94	819.68	818.60	817.68	817.18	816.99	816.89
MAX	821.24	819.49	820.58	819.81	819.23	820.11	820.17	819.01	818.16	817.31	817.08	817.03
MIN	819.40	819.09	818.95	818.97	818.38	818.09	819.08	818.21	817.34	817.09	816.88	816.76

CAL YR 1977 MEAN 818.62 MAX 821.40 MIN 817.13
WTR YR 1978 MEAN 818.62 MAX 821.24 MIN 816.76

04228500 GENESEE RIVER AT AVON, NY

LOCATION.--Lat 42°55'04", long 77°45'27", Livingston County, Hydrologic Unit 04130003, on right bank 250 ft (76 m) downstream from bridge on U.S. Highway 20 (State Highway 5), 0.3 mi (0.5 km) west of Avon, and 0.8 mi (1.3 km) downstream from Conesus Creek.

DRAINAGE AREA.--1,667 mi² (4,318 km²).

PERIOD OF RECORD.--August 1955 to current year.

REVISED RECORDS.--WSP 2112: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 500.11 ft (152.433 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are poor. Diurnal fluctuation at low flow caused by powerplant. Flow regulated to some extent by Rushford Lake (see station 04221990), at high flows by Mount Morris Lake (see station 04224000), and by Conesus Lake (see station 04227980). Monthly figures of discharge and runoff August 1955 to September 1965 adjusted for change in contents in Rushford Lake and Mount Morris Lake.

AVERAGE DISCHARGE.--23 years, 1,948 ft³/s (55.17 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,500 ft³/s (467 m³/s) June 25, 1972, gage height, 40.67 ft (12.396 m); minimum, 56 ft³/s (1.59 m³/s) Oct. 5, 1955, gage height, 13.73 ft (4.185 m), from graph based on gage readings.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 10,400 ft³/s (295 m³/s) Apr. 14, gage height 32.66 ft (9.955 m); minimum, 167 ft³/s (4.73 m³/s) Aug. 8, gage height, 14.17 ft (4.319 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7360	1520	3240	5000	3800	900	7970	3510	2400	512	333	208
2	7240	1590	5430	4600	4000	880	9130	2790	1260	488	371	208
3	8150	1780	5070	4200	3900	860	6190	2280	904	366	301	203
4	8290	1730	4340	3400	3400	860	4090	1440	892	368	256	211
5	9000	1640	2970	2900	2600	860	7250	1310	881	371	240	206
6	9120	1690	2100	2300	2000	840	6310	2060	806	304	296	198
7	8650	1710	2000	1700	1800	820	5890	2580	758	272	235	190
8	7080	4820	2300	1600	1800	800	7350	2440	747	347	177	180
9	5650	5410	2300	3100	1900	820	9310	2080	884	344	639	185
10	6250	3800	2100	2100	1800	840	9930	2100	1020	344	789	201
11	6290	6290	1900	2300	1700	880	6930	2480	965	288	542	198
12	6550	6490	2300	2400	1700	920	7400	2270	778	283	455	216
13	7470	4210	2900	2700	1700	1100	9860	1770	633	277	414	296
14	7510	3440	3700	2500	1700	2000	10300	2110	631	275	537	341
15	6470	2930	6400	2100	1600	5000	10100	3330	625	277	417	296
16	5490	3120	6600	1900	1500	6800	9790	2910	609	248	360	277
17	4870	3600	3500	1800	1500	6600	9470	3290	595	227	309	288
18	5120	5500	4000	1700	1400	5800	9570	3890	595	243	285	350
19	4940	5760	4800	1700	1300	4500	8230	3210	595	491	269	664
20	4630	4140	4900	1800	1200	4800	7680	3730	655	325	267	1010
21	3750	2730	3500	1900	1100	5200	7680	4320	669	272	275	997
22	2830	2540	4600	2300	1100	5600	7530	4420	521	299	259	836
23	2460	4330	5200	2600	1000	6000	8080	4860	283	317	256	769
24	2220	5150	5800	2500	1000	5200	8100	5530	534	280	237	741
25	2020	4910	6200	2600	980	3500	7700	5540	705	272	222	719
26	1880	4480	6600	3000	960	3600	7290	5910	839	272	216	691
27	1770	3730	6400	3500	940	6200	6840	5760	622	288	211	675
28	1670	2360	6200	4300	920	6870	5940	5460	603	309	201	672
29	1610	2050	6000	4200	---	6550	4950	4760	466	501	198	556
30	1630	2010	5800	3900	---	6990	4090	4190	412	371	206	477
31	1560	---	5400	3700	---	7480	---	3370	---	323	214	---
TOTAL	159530	105460	134550	86300	50300	110070	230950	105700	22887	10154	9987	13059
MEAN	5146	3515	4340	2784	1796	3551	7698	3410	763	328	322	435
MAX	9120	6490	6600	5000	4000	7480	10300	5910	2400	512	789	1010
MIN	1560	1520	1900	1600	920	800	4090	1310	283	227	177	180

CAL YR 1977 TOTAL 1057460 MEAN 2897 MAX 10700 MIN 360
WTR YR 1978 TOTAL 1038947 MEAN 2846 MAX 10300 MIN 177

04228845 HONEOYE LAKE NEAR HONEOYE, NY

LOCATION.--Lat 42°45'44", long 77°30'21", Ontario County, Hydrologic Unit 04130003, on east shore of Honeoye Lake, at Trident Marina on East Lake Road, 1.9 mi (3.1 km) south of U.S. Highway 20A, and 2.0 mi (3.2 km) southeast of Honeoye.

DRAINAGE AREA.--41.1 mi² (106 km²).

PERIOD OF RECORD.--July to December 1963. Occasional readings January to August 1964. October 1964 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. July 10, 1963 to Sept. 28, 1967, nonrecording gage and Sept. 29, 1967 to Sept. 30, 1969, recording gage at datum 800.35 ft (243.947 m) higher. Oct. 1, 1969 to Sept. 30, 1975, at datum 800.00 ft (243.840 m) higher.

REMARKS.--Area of water surface, 2.71 mi² (7.02 km²).

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 806.91 ft (245.946 m) June 23, 1972; minimum observed, 802.15 ft (244.495 m) present datum, Oct. 5, 1965, Oct. 1, 2, 1970.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 804.34 ft (245.163 m) Apr. 6; minimum, 802.32 ft (244.547 m) Sept. 16.

ELEVATION, IN FEET ABOVE NGVD, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	804.20	803.46	803.60	803.45	803.91	803.51	803.96	803.31	803.12	802.79	802.61	802.45
2	804.21	803.44	803.59	803.43	803.82	803.51	804.10	803.28	803.11	802.77	802.60	802.44
3	804.18	803.42	803.58	803.41	803.75	803.51	804.10	803.26	803.08	802.76	802.60	802.43
4	804.12	803.44	803.57	803.39	803.69	803.50	804.07	803.24	803.06	802.77	802.59	802.41
5	804.04	803.46	803.57	803.37	803.66	803.50	804.29	803.26	803.04	802.77	802.59	802.40
6	803.95	803.47	803.60	803.36	803.64	803.50	804.31	803.29	803.02	802.76	802.58	802.39
7	803.86	803.50	803.58	803.35	803.61	803.50	804.30	803.29	803.01	802.76	802.58	802.38
8	803.81	803.62	803.56	803.37	803.59	803.49	804.23	803.30	803.00	802.76	802.57	802.38
9	803.78	803.65	803.59	803.53	803.57	803.49	804.13	803.29	802.99	802.74	802.57	802.37
10	803.79	803.72	803.58	803.56	803.55	803.49	804.03	803.29	802.97	802.73	802.56	802.36
11	803.75	803.85	803.59	803.54	803.55	803.48	803.95	803.28	802.95	802.70	802.56	802.34
12	803.71	803.83	803.61	803.52	803.54	803.48	803.89	803.28	802.94	802.69	802.55	802.39
13	803.65	803.83	803.60	803.49	803.53	803.48	803.82	803.29	802.95	802.68	802.55	802.38
14	803.61	803.80	803.80	803.49	803.53	803.47	803.77	803.29	802.92	802.67	802.54	802.38
15	803.61	803.78	804.15	803.49	803.52	803.50	803.70	803.26	802.89	802.66	802.54	802.35
16	803.61	803.78	804.20	803.46	803.51	803.58	803.65	803.27	802.88	802.66	802.56	802.37
17	803.78	803.82	804.14	803.45	803.48	803.60	803.60	803.33	802.86	802.65	802.55	802.39
18	803.89	803.92	804.08	803.50	803.48	803.56	803.56	803.35	802.86	802.64	802.53	802.45
19	803.90	803.93	804.12	803.47	803.47	803.56	803.53	803.35	802.88	802.63	802.54	802.59
20	803.88	803.91	804.07	803.47	803.47	803.54	803.52	803.35	802.90	802.62	802.56	802.59
21	803.84	803.86	804.02	803.48	803.47	803.66	803.58	803.36	802.92	802.62	802.54	802.61
22	803.80	803.81	803.96	803.45	803.47	803.99	803.58	803.34	802.95	802.63	802.52	802.59
23	803.76	803.78	803.87	803.43	803.48	804.11	803.56	803.33	802.93	802.63	802.51	802.59
24	803.72	803.72	803.80	803.42	803.50	804.16	803.53	803.30	802.91	802.62	802.51	802.56
25	803.68	803.69	803.78	803.41	803.50	804.08	803.50	803.28	802.89	802.61	802.49	802.57
26	803.64	803.66	803.73	803.60	803.51	804.02	803.47	803.26	802.89	802.60	802.49	802.56
27	803.61	803.61	803.66	803.91	803.51	804.02	803.44	803.24	802.88	802.63	802.47	802.56
28	803.58	803.59	803.59	804.06	803.51	803.99	803.41	803.22	802.86	802.64	802.48	802.54
29	803.55	803.55	803.54	804.15	---	803.96	803.38	803.20	802.84	802.63	802.48	802.53
30	803.52	803.53	803.50	804.16	---	803.90	803.34	803.17	802.82	802.62	802.46	802.53
31	803.49	---	803.47	804.03	---	803.85	---	803.15	---	802.61	802.46	---
MEAN	803.79	803.68	803.75	803.55	803.57	803.68	803.78	803.28	802.94	802.68	802.54	802.46
MAX	804.21	803.93	804.20	804.16	803.91	804.16	804.31	803.36	803.12	802.79	802.61	802.61
MIN	803.49	803.42	803.47	803.35	803.47	803.47	803.34	803.15	802.82	802.60	802.46	802.34

CAL YR 1977 MEAN 803.57 MAX 804.75 MIN 803.07
WTR YR 1978 MEAN 803.31 MAX 804.31 MIN 802.34

04228919 HEMLOCK LAKE NEAR HEMLOCK, NY

LOCATION.--Lat 42°46'30", long 77°36'36", Livingston County, Hydrologic Unit 04130003, at Rochester Water Bureau filtration plant at north end of Hemlock Lake, 1.5 mi (2.4 km) south of Hemlock.

PERIOD OF RECORD.--Water years 1976 to current year.
CHEMICAL DATA: 1976-78 (b).
MINOR ELEMENTS DATA: 1976-78 (b).
RADIOLOGICAL DATA: 1976-78 (b).
PESTICIDE DATA: 1976-78 (b).
ORGANIC DATA: TOC--1976-78 (b).
PCB--1976-78 (b).
PCN--1976-78 (b).
NUTRIENT DATA: 1976-78 (b).

REMARKS.--Raw-water samples are collected from tap in filtration plant laboratory.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)
NOV , 1977												
08...	1400	220	6.9	12.5	83	21	24	5.6	7.8	1.5	75	0
MAR , 1978												
23...	1400	245	7.1	4.5	87	24	25	5.9	8.2	1.6	76	0
JUN												
15...	1400	225	7.6	19.0	86	29	25	5.8	7.4	1.3	70	0
SEP												
14...	1430	215	7.3	21.0	88	30	26	5.7	7.2	1.3	71	0

DATE	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)
NOV , 1977												
08...	62	22	13	.1	1.6	133	113	2	.14	.00	.14	.00
MAR , 1978												
23...	62	23	12	.1	1.0	111	114	1	.21	.00	.21	.01
JUN												
15...	57	24	13	.1	1.0	115	112	<1	.19	.00	.19	.01
SEP												
14...	58	23	12	.1	.8	137	111	3	.04	.00	.04	.00

DATE	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO. TOTAL (MG/L AS P)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
NOV , 1977												
08...	.30	.30	.44	.02	.00	110	1	0	0	<10	0	65
MAR , 1978												
23...	.29	.30	.51	.00	.00	60	1	0	0	<10	0	20
JUN												
15...	.17	.18	.37	.01	.00	80	3	0	0	<10	0	16
SEP												
14...	.40	.40	.44	.01	.00	80	0	0	1	20	2	17

DATE	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LITHIUM TOTAL RECOVERABLE (UG/L AS LI)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	STRONTIUM, TOTAL RECOVERABLE (UG/L AS SR)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)
NOV , 1977											
08...	190	2	0	60	<.5	0	1	0	0	50	20
MAR , 1978											
23...	60	10	0	10	<.5	0	3	0	0	70	10
JUN											
15...	100	6	0	10	<.5	1	2	0	0	70	20
SEP											
14...	110	3	0	10	<.5	0	8	0	0	70	0

04228919 HEMLOCK LAKE NEAR HEMLOCK, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	CARBON, ORGANIC TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	PCB, TOTAL (UG/L)	NAPH-THA-LENES, POLY-CHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR-DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)
NOV 08...	8.1	.00	--	.0	.00	.00	.0	.00	.00	.00
MAR 23...	3.4	.00	.00	.0	.00	.00	.0	.00	.00	.00
JUN 15...	8.3	.00	--	.0	.00	.00	.0	.00	.00	.00
SEP 14...	.7	.00	.00	.0	.00	.00	.0	.00	.00	.00

DATE	DI-AZINON, TOTAL (UG/L)	DI-ELDRIN TOTAL (UG/L)	ENDO-SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	ETHION, TOTAL (UG/L)	HEPTA-CHLOR, TOTAL (UG/L)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	MALA-THION, TOTAL (UG/L)	METH-OXY-CHLOR, TOTAL (UG/L)
NOV 08...	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
MAR 23...	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
JUN 15...	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
SEP 14...	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

DATE	METHYL PARA-THION, TOTAL (UG/L)	METHYL TRI-THION, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	PARA-THION, TOTAL (UG/L)	TOX-APHENE, TOTAL (UG/L)	TOTAL TRI-THION (UG/L)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	SILVEX, TOTAL (UG/L)
NOV 08...	.00	.00	.00	.00	0	.00	.00	.00	.00
MAR 23...	.00	.00	.00	.00	0	.00	.00	.00	.00
JUN 15...	.00	.00	.00	.00	0	.00	.00	.00	.00
SEP 14...	.00	.00	.00	.00	0	.00	.00	.00	.00

DATE	GROSS ALPHA, DIS-SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	RADIUM 226, DIS-SOLVED, RADON METHOD (PCI/L)	URANIUM DIS-SOLVED, EXTRAC-TION (UG/L)	STRON-TIUM 90 DIS-SOLVED (PCI/L)
NOV 08...	<1.3	<.4	3.8	<.4	3.5	<.4	.16	.17	.4
MAR 23...	<2.7	<.4	3.0	<.4	2.6	<.4	.08	--	--
JUN 15...	9.2	<.4	5.3	<.4	4.9	<.4	.04	--	<.4
SEP 14...	<1.1	<.4	1.8	<.4	1.7	<.4	.03	--	<.4

04228950 CANADICE LAKE NEAR HEMLOCK, NY

04229000 CANADICE OUTLET NEAR HEMLOCK, NY

LOCATION.--Lake: Lat 42°44'27", long 77°34'20", Ontario County, Hydrologic Unit 04130003, at dam at outlet of Canadice Lake, 3.6 mi (5.8 km) upstream from point of diversion to Hemlock Lake, and 4 mi (6 km) southeast of Hemlock. Outlet: Lat 42°44'27", long 77°34'20", Ontario County, upstream from weir, 60 ft (18.3 m) downstream from dam.

DRAINAGE AREA.--12.4 mi^2 (32.1 km^2).

PERIOD OF RECORD.--Lake: October 1970 to current year.
Outlet: April 1903 to current year. Prior to October 1966, published as "Canadice Lake Outlet."

REVISED RECORDS.--WSP 2112: Drainage area; 1967.

GAGE.--Nonrecording gage read once daily and whenever control gate is changed. Datum of gage is 1,093.00 ft (333.146 m) National Geodetic Vertical Datum of 1929 (furnished by city of Rochester).

REMARKS.--Outflow from Canadice Lake diverted into Hemlock Lake for Rochester water supply. Flow regulated by gates at dam and augmented by pumping. Discharge computed by weir formula and from pumping records. Intermittent flow over spillway is not monitored. Accuracy of adjusted record, as indicative of natural runoff, is therefore reduced.

COOPERATION.--Records furnished by Department of Public Works, City of Rochester.

AVERAGE DISCHARGE.--75 years, 11.5 ft^3/s (0.326 m^3/s), unadjusted.

MONTHEND ELEVATION, CONTENTS, AND MONTHLY DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCT. 1977 TO SEPT. 1978

	04228950 CANADICE LAKE			04229000 CANADICE OUTLET			
	* Elevation FT	Contents FT^3	Change in contents FT^3/S	Observed discharge MEAN	† Adjusted for change in contents in Canadice Lake MEAN	CFSM	IN.
October	1,098.63	486.42	- 4.08	15.7	14.1	1.14	1.32
November	1,096.96	430.72	- 55.7	46.1	24.6	1.98	2.22
December	1,096.89	428.48	- 2.24	27.8	27.0	2.18	2.51
CAL YR 1977			+ 33.1	14.5	15.5	1.25	17.01
January	1,095.55	386.05	- 42.4	43.1	27.2	2.19	2.53
February	1,093.18	316.04	- 70.0	35.9	6.92	.56	.58
March	1,096.03	400.96	+ 84.9	9.91	41.6	3.35	3.87
April	1,098.79	491.86	- 90.9	0	35.1	2.83	3.16
May	1,098.74	490.16	- 1.70	0	- .63	- .05	- .06
June	1,098.45	480.30	- 9.86	2.79	- 1.01	- .08	- .09
July	1,095.53	385.43	- 94.9	29.8	- 5.58	- .45	- .52
August	1,092.41	294.48	- 91.0	27.4	- 6.59	- .53	- .61
September	1,091.67	273.76	- 20.7	.36	- 7.63	- .62	- .69
WTR YR 1978			-216.7	19.9	13.0	1.05	14.21

* Elevation at 2400 hours on last day of month.
† Adjustments by Geological Survey. Negative figures indicate that natural losses from Canadice Lake exceeded inflow or that unmonitored spillage occurred.

NOTE.--All figures of contents expressed in millions.

04229500 HONEOYE CREEK AT HONEOYE FALLS, NY

LOCATION.--Lat 42°57'24", long 77°35'21", Monroe County, Hydrologic Unit 04130003, on right bank 25 ft (8 m) downstream from bridge on State Highway 65 at Honeoye Falls, and 13 mi (21 km) upstream from mouth.

DRAINAGE AREA.--195 mi² (505 km²).

PERIOD OF RECORD.--October 1945 to September 1970, October 1972 to current year.

REVISED RECORDS.--WSP 2112: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 610.00 ft (185.928 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 30, 1970, water-stage recorder at same site at datum 609.76 ft (185.855 m) NGVD.

REMARKS.--Records fair except those for winter periods, which are poor. Outlet of Honeoye Lake not controlled (see station 04228845). Some diversion from and regulation by Hemlock and Canadice Lakes for water supply of city of Rochester. Diurnal fluctuation at low flow caused by mills upstream from station. Prior to 1967 water year, published monthly figures adjusted for change in contents in, and diversion from, Hemlock and Canadice Lakes. During low-water periods the village of Honeoye Falls pumps water from two deep wells with maximum pumping capacity of 600 gpm (1.3 ft³/s or 0.037 m³/s). This pumped water enters creek upstream from gage.

AVERAGE DISCHARGE.--31 years (1946-70, 1973-78), 122 ft³/s (3.455 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,630 ft³/s (131 m³/s) Mar. 28, 1950, gage height, 6.42 ft (1.957 m), from rating curve extended above 2,100 ft³/s (59.5 m³/s); minimum, 0.06 ft³/s (0.002 m³/s) Aug. 28, 1949.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,830 ft³/s (51.8 m³/s) Dec. 15, gage height, 3.98 ft (1.213 m); minimum discharge, 2.2 ft³/s (0.062 m³/s) Sept. 5, 6, 7, 8-11, 12, gage height, 0.11 ft (0.034 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	751	134	473	230	450	110	416	136	53	12	9.2	2.4
2	1140	134	467	220	400	110	566	129	48	11	10	2.4
3	941	123	327	210	370	110	422	96	45	10	9.2	2.4
4	848	143	290	200	330	100	374	82	44	11	6.3	2.4
5	715	250	251	190	300	100	582	90	40	11	5.8	2.2
6	599	250	185	190	280	96	572	175	38	9.6	6.3	2.4
7	505	230	190	197	250	94	537	157	36	7.8	6.0	2.4
8	450	366	210	250	240	92	574	124	37	6.5	5.8	2.2
9	460	399	210	619	220	90	506	149	38	5.8	5.5	2.2
10	599	344	190	371	210	90	448	151	36	4.9	4.9	2.2
11	499	573	190	319	200	90	410	115	30	4.1	3.9	2.4
12	414	477	190	344	190	90	372	99	27	3.9	3.4	4.7
13	362	404	238	335	180	100	359	105	26	3.8	3.0	4.9
14	311	399	536	279	180	253	321	119	28	3.6	2.7	5.1
15	295	399	1520	240	170	1230	298	115	27	3.6	3.4	4.7
16	303	466	1230	220	160	1270	274	103	24	3.6	4.1	5.5
17	517	488	742	210	160	749	249	166	21	3.8	4.1	8.5
18	687	653	596	200	160	492	225	193	20	3.8	4.5	14
19	523	599	1010	200	150	393	219	165	20	3.8	4.3	158
20	419	455	751	200	150	466	278	145	21	3.8	5.1	123
21	366	399	660	190	140	754	474	147	27	4.3	4.3	49
22	303	390	554	190	140	1390	431	150	25	5.1	4.3	23
23	261	361	473	210	130	1080	348	130	31	7.3	3.8	14
24	234	336	455	230	130	877	299	119	27	7.1	3.6	9.2
25	217	311	536	260	130	526	255	107	23	5.5	3.6	7.3
26	205	292	488	385	120	432	220	96	20	6.8	3.4	6.0
27	196	268	340	825	120	671	195	87	18	7.3	3.0	5.1
28	176	245	300	926	120	579	181	80	17	9.6	2.8	4.3
29	161	236	270	787	---	494	165	74	15	15	2.7	3.8
30	148	229	250	605	---	413	151	67	13	15	2.5	3.3
31	137	---	240	500	---	378	---	60	---	12	2.4	---
TOTAL	13742	10353	14362	10332	5780	13719	10723	3731	875	222.4	143.9	479.0
MEAN	443	345	463	333	206	443	357	120	29.2	7.17	4.64	16.0
MAX	1140	653	1520	926	450	1390	582	193	53	15	10	158
MIN	137	123	185	190	120	90	151	60	13	3.6	2.4	2.2

CAL YR 1977 TOTAL 87404.1 MEAN 239 MAX 2030 MIN 6.3
WTR YR 1978 TOTAL 84462.3 MEAN 231 MAX 1520 MIN 2.2

04230380 OATKA CREEK AT WARSAW, NY

LOCATION.--Lat 42°44'39", long 78°08'16", Wyoming County, Hydrologic Unit 04130003, on right bank 400 ft (122 m) downstream from bridge on Court Street, Warsaw.

DRAINAGE AREA.--41.9 mi² (109 km²).

PERIOD OF RECORD.--December 1963 to current year.

REVISED RECORDS.--WSP 2112: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 987.15 ft (300.883 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Records fair except those for winter periods, which are poor.

AVERAGE DISCHARGE.--14 years (1964-78), 54.0 ft³/s (1.529 m³/s), 17.50 in/yr (444 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,010 ft³/s (114 m³/s) June 23, 1972, gage height, 9.75 ft (2.972 m), from rating curve extended above 1,770 ft³/s (50.1 m³/s) on basis of slope-area measurement of peak discharge; minimum, 0.90 ft³/s (0.025 m³/s) Aug. 1, 1965; minimum gage height, 1.09 ft (0.332 m) July 22, 23, 1974.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 690 ft³/s (19.5 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Nov. 7	1745	914	25.9	4.77	1.454	Jan. 26	1430	ice jam		4.66	1.420
Dec. 14	2100	739	20.9	4.27	1.301	Apr. 1	1715	1,060	30.0	5.18	1.579
Dec. 18	2045	788	22.3	4.41	1.344	Apr. 4	2215	*1,770	50.1	*7.04	2.146
Jan. 11	1430	ice jam		5.82	1.774						

Minimum discharge, 2.7 ft³/s (0.076 m³/s) Sept. 8, gage height, 1.63 ft (0.497 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	309	23	274	52	100	34	665	32	19	9.2	6.6	5.3
2	267	23	96	52	94	33	283	32	17	9.2	5.9	4.7
3	217	22	68	50	86	33	136	30	17	11	6.6	3.6
4	117	62	58	48	76	32	459	28	16	17	7.4	4.1
5	84	59	48	45	72	32	545	68	17	12	6.6	3.6
6	73	36	56	44	68	31	225	66	17	10	7.4	4.1
7	71	361	66	42	64	30	345	45	19	9.2	7.4	3.1
8	64	223	54	160	62	30	186	37	30	9.2	6.6	4.7
9	153	96	50	290	60	31	127	53	22	9.2	5.9	5.3
10	106	190	48	120	58	31	122	42	17	9.2	5.3	4.7
11	69	159	46	94	56	32	171	35	15	8.3	5.3	4.7
12	64	114	64	76	54	32	155	32	12	7.4	5.3	28
13	52	103	90	70	52	33	124	47	13	7.4	4.7	9.2
14	45	89	380	60	49	94	102	273	15	7.4	4.7	5.9
15	42	127	420	56	47	200	84	129	12	7.4	4.7	7.4
16	36	179	200	54	45	170	76	82	11	7.4	5.9	22
17	64	217	130	52	44	120	71	345	15	7.4	6.6	15
18	62	315	370	50	43	84	66	240	28	6.6	5.3	47
19	59	190	330	49	42	72	68	110	19	6.6	5.9	84
20	57	133	180	48	41	70	112	79	17	5.9	16	19
21	47	261	150	49	40	318	127	124	84	6.6	6.6	11
22	44	147	110	49	39	444	107	76	32	8.3	5.3	9.2
23	41	98	98	48	38	512	87	59	19	6.6	5.3	9.2
24	35	93	88	56	37	306	68	50	13	5.9	5.9	7.4
25	34	77	150	110	36	159	56	42	12	5.9	5.9	7.4
26	32	73	90	170	35	138	47	37	10	6.6	5.9	6.6
27	31	66	78	250	35	190	45	32	10	32	4.7	6.6
28	28	61	72	160	34	199	39	28	11	15	5.9	7.4
29	26	57	64	130	---	202	37	26	11	8.3	5.9	7.4
30	25	73	58	120	---	147	35	24	10	7.4	5.3	6.6
31	24	---	54	110	---	199	---	22	---	6.6	5.3	---
TOTAL	2378	3727	4040	2764	1507	4038	4770	2327	560	286.2	192.1	364.2
MEAN	76.7	124	130	89.2	53.8	130	159	75.1	18.7	9.23	6.20	12.1
MAX	309	361	420	290	100	512	665	345	84	32	16	84
MIN	24	22	46	42	34	30	35	22	10	5.9	4.7	3.1
CFSM	1.83	2.96	3.10	2.13	1.28	3.10	3.80	1.79	.45	.22	.15	.29
IN.	2.11	3.31	3.59	2.45	1.34	3.58	4.23	2.07	.50	.25	.17	.32

CAL YR 1977 TOTAL 29731.4 MEAN 81.5 MAX 914 MIN 3.9 CFSM 1.95 IN 26.40
WTR YR 1978 TOTAL 26953.5 MEAN 73.8 MAX 665 MIN 3.1 CFSM 1.76 IN 23.93

04230500 OATKA CREEK AT GARBUTT, NY

LOCATION.--Lat 43°00'36", long 77°47'30", Monroe County, Hydrologic Unit 04130003, on right bank 40 ft (12 m) downstream from bridge on Union Street in Garbutt, 1.5 mi (2.4 km) west of Scottsville, and 4.0 mi (6.4 km) upstream from mouth.

DRAINAGE AREA.--204 mi² (528 km²).

PERIOD OF RECORD.--October 1945 to current year.

REVISED RECORDS.--WSP 2112: Drainage area. WRD NY 1971: 1960(M).

GAGE.--Water-stage recorder. Datum of gage is 560.86 ft or 170.950 m (revised) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

AVERAGE DISCHARGE.--33 years, 213 ft³/s (6.032 m³/s), 14.18 in/yr (360 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,050 ft³/s (200 m³/s) Mar. 31, 1960, gage height, 8.64 ft (2.633 m); minimum, 3.3 ft³/s (0.093 m³/s) Sept. 11, 12, 1958; minimum gage height, 1.88 ft (0.573 m) June 19, 1959, result of regulation; minimum daily discharge, 13 ft³/s (0.37 m³/s) Oct. 30 to Nov. 1, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,500 ft³/s (42.5 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 16	2000	2,260	64.0	5.91	1.801	Apr. 2	2345	2,030	57.5	5.69	1.734
Dec. 20	0315	2,650	75.0	6.25	1.905	Apr. 6	0830	2,340	66.3	5.98	1.823
Mar. 23	2345	*3,360	95.2	*6.80	2.073						

Minimum discharge, 30 ft³/s (0.85 m³/s) Sept. 7, 8, 9, 10, 11, 12, 14, 15, 16, gage height, 2.29 ft (0.698 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	552	152	535	418	465	176	1090	220	127	64	46	33
2	854	149	647	370	413	170	1720	213	122	61	44	33
3	1070	143	659	300	377	170	1610	206	114	61	50	33
4	1110	158	476	310	343	173	929	199	110	64	52	32
5	827	166	370	339	316	170	1350	203	107	61	45	32
6	598	217	240	330	303	160	2060	246	105	63	43	32
7	470	239	280	321	290	150	1280	274	107	63	43	31
8	402	628	290	358	284	150	1160	235	122	59	42	31
9	434	874	310	1000	266	150	957	226	124	57	41	31
10	535	782	280	780	260	160	691	244	114	56	40	31
11	507	769	270	744	250	167	592	236	103	54	39	31
12	445	737	290	616	254	170	592	209	93	53	39	36
13	367	666	339	546	246	179	616	202	89	51	38	32
14	325	546	476	502	240	231	552	218	84	51	38	31
15	299	497	1260	413	220	616	465	355	82	51	39	31
16	278	507	1940	382	220	993	407	526	82	51	43	36
17	274	552	1840	353	224	1140	372	517	80	49	38	35
18	303	731	1290	316	210	1080	348	737	76	48	38	43
19	303	929	2260	307	210	894	330	929	89	48	36	129
20	270	901	2390	307	200	840	353	573	93	48	41	162
21	258	635	1450	286	190	1040	529	375	86	49	37	92
22	235	535	1090	282	190	1990	581	362	152	49	36	63
23	220	569	874	282	180	3020	513	302	220	46	36	49
24	210	481	750	278	186	2960	423	246	138	44	36	41
25	196	407	795	286	186	1950	348	217	100	44	37	38
26	189	367	740	358	182	1220	312	196	86	44	35	36
27	186	330	620	460	179	1120	282	176	80	51	35	34
28	179	299	540	524	176	1160	262	167	74	44	35	36
29	173	286	507	563	---	1160	246	155	70	44	34	33
30	167	282	486	563	---	1120	231	146	66	61	34	33
31	158	---	455	513	---	972	---	138	---	50	33	---
TOTAL	12394	14554	24749	13407	7060	25651	21201	9250	3095	1639	1225	1340
MEAN	400	485	798	432	252	827	707	298	103	52.9	39.5	44.7
MAX	1110	929	2390	1000	465	3020	2060	929	220	64	52	162
MIN	158	143	240	278	176	150	231	138	66	44	33	31
CFSM	1.96	2.38	3.91	2.12	1.24	4.05	3.47	1.46	.51	.26	.19	.22
IN.	2.26	2.65	4.51	2.44	1.29	4.68	3.87	1.69	.56	.30	.22	.24

CAL YR 1977 TOTAL 135776 MEAN 372 MAX 2550 MIN 37 CFSM 1.82 IN 24.76
WTR YR 1978 TOTAL 135565 MEAN 371 MAX 3020 MIN 31 CFSM 1.82 IN 24.72

04230650 GENESEE RIVER AT BALLANTYNE BRIDGE NEAR MORTIMER, NY

LOCATION.--Lat 43°05'26", long 77°40'52", Monroe County, Hydrologic Unit 04130003, on right bank 400 ft (120 m) upstream from Ballantyne Bridge on State Highway 252, 1.6 mi (2.6 km) west of Mortimer, and 2.8 mi (4.5 km) upstream from Erie (Barge) Canal.

DRAINAGE AREA.--2,206 mi^2 (5714 km^2).

PERIOD OF RECORD.--October 1973 to current year.

GAGE.--Water-stage recorder. Datum of gage is 500.00 ft (152.400 m) National Geodetic Vertical Datum of 1929.

REMARKS.--River regulated at high stages by Mount Morris Lake (see station 04224000). River regulated for operation of Erie (Barge) Canal and downstream powerplants.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 19.33 ft (5.892 m) Mar. 5, 1976; minimum, 8.21 ft (2.502 m) Dec. 20, 1973.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 17.19 ft (5.240 m) Mar. 24; minimum, 9.87 ft (3.008 m) May 10.

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14.96	12.02	12.89	14.05	14.70	12.27	14.85	12.87	12.24	11.87	11.84	12.01
2	14.80	12.30	13.94	13.89	14.84	12.06	15.64	12.43	12.06	11.96	11.90	12.01
3	15.45	12.36	13.82	13.28	14.51	12.03	14.99	12.45	12.05	11.86	11.92	11.97
4	15.47	12.34	13.51	13.12	14.10	12.14	12.75	12.13	12.16	11.72	12.00	12.08
5	15.54	12.32	12.88	12.95	13.44	12.06	14.45	12.26	12.18	11.74	12.00	11.96
6	15.49	12.48	12.32	12.55	12.85	12.01	15.05	12.32	12.10	11.79	12.04	11.98
7	15.27	12.38	12.31	12.39	12.86	11.79	14.33	11.96	12.11	11.80	12.03	12.08
8	14.41	13.27	12.41	12.23	13.08	11.79	14.77	12.36	12.01	11.83	11.97	12.00
9	13.68	13.92	12.73	13.32	12.83	11.79	15.42	12.15	12.17	11.87	12.03	11.83
10	14.00	13.40	13.34	12.88	12.67	11.57	15.68	11.09	11.96	11.90	12.04	11.81
11	14.09	14.20	13.08	13.02	12.44	11.17	14.40	12.17	12.09	11.84	11.63	11.82
12	14.06	14.00	12.93	15.10	12.54	10.97	13.91	12.21	12.06	11.75	11.84	12.00
13	14.47	13.50	12.25	14.99	12.59	10.94	15.08	12.14	12.09	11.69	11.87	12.02
14	14.48	13.00	13.09	14.44	12.52	10.68	15.40	12.19	12.07	11.89	12.01	12.13
15	13.93	12.70	15.73	14.12	12.49	12.86	15.31	12.50	12.13	11.81	12.12	12.10
16	13.62	12.80	16.43	13.65	12.21	14.90	15.13	12.52	11.97	11.76	12.03	12.01
17	13.44	13.00	15.28	13.38	12.13	14.84	14.95	12.62	11.90	11.75	12.05	12.01
18	13.80	13.60	14.01	12.90	12.44	14.39	14.97	12.92	11.89	11.77	11.99	12.01
19	13.59	13.60	16.64	13.03	12.18	14.28	14.54	12.38	11.93	11.99	11.92	12.11
20	13.34	13.10	15.75	12.93	12.38	14.99	14.18	12.47	12.07	12.09	11.89	12.17
21	13.08	12.86	14.16	13.10	12.02	15.33	14.68	12.54	12.05	11.99	11.95	12.15
22	12.57	12.82	14.08	13.46	12.13	16.82	14.64	12.74	11.93	11.85	12.00	12.02
23	12.57	13.32	14.06	13.65	12.12	17.03	14.71	13.00	11.88	11.82	11.92	11.92
24	12.38	13.67	14.20	13.34	11.91	16.87	14.68	13.35	11.83	11.89	11.88	11.98
25	12.29	13.45	14.32	13.12	12.13	15.29	14.47	13.37	12.04	11.93	11.82	12.10
26	12.36	13.37	14.60	13.14	12.28	13.69	14.32	13.29	12.10	11.97	11.77	12.06
27	12.24	13.05	14.48	14.22	12.26	14.63	14.13	13.24	11.93	11.96	11.73	12.15
28	12.13	12.56	14.67	15.15	12.25	15.15	13.63	13.19	11.99	11.88	11.69	12.10
29	12.18	12.51	14.55	15.10	---	14.75	13.10	12.92	11.84	12.00	11.78	11.99
30	12.23	12.48	14.46	14.73	---	14.74	12.80	12.80	11.82	12.04	11.83	11.75
31	12.15	---	14.26	14.51	---	14.73	---	12.61	---	11.93	11.94	---
MEAN	13.68	13.02	13.97	13.60	12.75	13.50	14.57	12.55	12.02	11.87	11.92	12.01
MAX	15.54	14.20	16.64	15.15	14.84	17.03	15.68	13.37	12.24	12.09	12.12	12.17
MIN	12.13	12.02	12.25	12.23	11.91	10.68	12.75	11.09	11.82	11.69	11.63	11.75

CAL YR 1977 MEAN 12.69 MAX 16.64 MIN 9.68
WTR YR 1978 MEAN 12.96 MAX 17.03 MIN 10.68

04231000 BLACK CREEK AT CHURCHVILLE, NY

LOCATION.--Lat 43°06'02", long 77°52'57", Monroe County, Hydrologic Unit 04130003, on right bank at east end of Carrol Street in Churchville, 100 ft (30 m) downstream from main-line tracks of Penn Central Transportation Co., and 0.3 mi (0.5 km) downstream from Black Creek Dam.

DRAINAGE AREA.--123 mi² (319 km²).

PERIOD OF RECORD.--October 1945 to current year.

GAGE.--Water-stage recorder. Datum of gage is 552.45 ft (168.387 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Records fair except those for winter periods, which are poor. Prior to May 1952, small diversion by Penn Central Transportation Co. and slight regulation by pumping operations upstream from station.

AVERAGE DISCHARGE.--33 years, 114 ft³/s (3.228 m³/s), 12.59 in/yr (320 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,880 ft³/s (138 m³/s) Mar. 31, 1960, gage height, 9.44 ft (2.877 m); minimum, 0.22 ft³/s (0.006 m³/s) Aug. 19, 1970; minimum gage height, 0.93 ft (0.283 m) Aug. 5-7, Sept. 15, 1959.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 800 ft³/s (22.7 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 17	0630	1,440	40.8	5.83	1.777
Dec. 20	1130	1,930	54.7	6.59	2.009
Mar. 18	0700	1,120	31.7	5.23	1.594
Mar. 23	2300	*2,720	77.0	*7.59	2.313

Minimum discharge, 3.0 ft³/s (0.085 m³/s) July 18, gage height, 1.21 ft (0.369 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	305	82	289	140	290	110	586	100	41	12	14	9.8
2	335	81	434	130	260	110	704	94	40	11	12	9.3
3	521	78	437	130	230	110	594	91	37	11	14	10
4	561	90	287	130	220	100	409	88	34	20	14	9.8
5	463	126	186	130	210	100	473	92	34	25	14	9.3
6	332	147	121	130	200	100	673	117	35	21	12	18
7	233	162	119	150	190	96	550	131	40	17	11	20
8	184	226	140	188	190	94	553	121	74	14	11	20
9	205	289	172	313	180	92	391	122	101	14	9.8	20
10	233	321	190	504	180	92	292	126	84	16	8.8	18
11	264	332	170	535	180	90	247	119	57	14	8.8	14
12	233	406	160	379	170	120	240	109	40	12	8.8	21
13	186	397	150	250	170	134	242	109	35	10	7.8	22
14	168	319	200	230	160	160	212	116	37	9.3	7.0	15
15	153	274	575	220	160	274	184	127	37	9.3	16	14
16	140	252	1020	200	160	473	164	140	37	10	25	16
17	133	289	1390	190	150	935	151	143	38	9.8	21	27
18	134	355	1120	170	150	1080	141	176	31	5.7	14	41
19	138	403	1220	160	150	939	140	195	27	6.5	14	67
20	134	338	1840	150	140	815	182	153	27	7.4	16	90
21	122	266	1300	150	140	939	347	131	27	9.8	15	76
22	112	210	850	150	140	1490	457	124	29	10	11	40
23	106	186	642	160	130	2470	319	112	28	9.8	8.3	28
24	103	172	487	180	130	2560	223	94	27	8.3	8.8	21
25	101	162	500	193	120	1750	172	81	22	8.8	11	16
26	101	156	450	233	120	916	145	71	22	8.8	11	14
27	98	141	300	300	120	859	129	62	22	14	9.8	12
28	95	133	210	338	110	1020	119	57	19	14	10	12
29	92	129	170	379	---	881	111	53	16	13	10	11
30	88	134	150	340	---	748	106	49	14	12	11	11
31	85	---	140	330	---	583	---	45	---	15	13	---
TOTAL	6158	6656	15419	7222	4750	20240	9256	3348	1112	378.5	377.9	712.2
MEAN	199	222	497	233	170	653	309	108	37.1	12.2	12.2	23.7
MAX	561	406	1840	535	290	2560	704	195	101	25	25	90
MIN	85	78	119	130	110	90	106	45	14	5.7	7.0	9.3
CFSM	1.62	1.81	4.04	1.89	1.38	5.31	2.51	.88	.30	.10	.10	.19
IN.	1.86	2.01	4.66	2.18	1.44	6.12	2.80	1.01	.34	.11	.11	.22

CAL YR 1977 TOTAL 66256.6 MEAN 182 MAX 1840 MIN 3.2 CFSM 1.48 IN 20.04
WTR YR 1978 TOTAL 75629.6 MEAN 207 MAX 2560 MIN 5.7 CFSM 1.68 IN 22.87

04232000 GENESEE RIVER AT ROCHESTER, NY

LOCATION.--Lat 43°10'50", long 77°37'40", Monroe County, Hydrologic Unit 04130003, on right bank 40 ft (12 m) downstream from Rochester Gas and Electric Corp. plant 5, 100 ft (30 m) upstream from bridge on Driving Park Avenue in Rochester, and 6.1 mi (9.8 km) upstream from mouth.

DRAINAGE AREA.--2,457 mi² (6,364 km²).

PERIOD OF RECORD.--April 1904 to September 1918, December 1919 to current year. Published as "at Driving Park Avenue," 1919-68.

REVISED RECORDS.--WSP 1912: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 246.24 ft (75.054 m) National Geodetic Vertical Datum of 1929 (247.00 ft or 75.286 m, Barge Canal datum). April 1904 to December 1910, nonrecording gage and December 1910 to September 1918, water-stage recorder at site 5 mi (8 km) upstream at datum 506.85 ft (154.488 m), Barge Canal datum. December 1919 to Apr. 4, 1927, water-stage recorder in plant 5, and Apr. 4, 1927 to June 19, 1956, at present site at datum 250.00 ft (76.200 m), Barge Canal datum.

REMARKS.--Records fair. Extensive diurnal fluctuation caused by powerplants upstream from station. New York State Erie (Barge) Canal crosses river 5.4 mi (8.7 km) upstream from station. Water diverted by the canal from Lake Erie is discharged into river from the west, the canal again diverting a smaller amount of water from river to the east. Additional regulation is provided by Rushford Lake and Mount Morris Lake.

AVERAGE DISCHARGE.--71 years, (1905-18, 1920-78), 2,774 ft³/s (78.56 m³/s), 15.33 in/yr (389 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 48,300 ft³/s (1,370 m³/s) Mar. 30, 1916, gage height, 15.3 ft (4.66 m) site and datum then in use; maximum at present site, 34,400 ft³/s (974 m³/s) Mar. 19, 1942; maximum gage height, 17.08 ft (5.206 m) Apr. 2, 1940, present datum; minimum discharge, less than 10 ft³/s (0.28 m³/s), occurred during low-water periods when powerplant was shut down; minimum daily, 91 ft³/s (2.58 m³/s) Jan. 9, 29, Feb. 1, 8, 1961.

EXTREMES OUTSIDE PERIOD OF RECORD.--Discharge on Mar. 18, 1865, was about 54,000 ft³/s (1,530 m³/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 17,100 ft³/s (484 m³/s) Dec. 19, gage height, 12.28 ft (3.743 m), result of regulation; minimum, 17 ft³/s (0.48 m³/s) Aug. 13, gage height, 0.79 ft (0.241 m), result of regulation during period of backwater from Lake Ontario.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11200	2330	5220	8230	6490	1930	11500	4190	3010	543	852	459
2	10500	2010	7860	7570	6910	2030	13000	3810	2400	571	739	462
3	11800	2420	7340	6730	6770	1870	11600	3130	1340	543	846	473
4	11900	2700	6300	5580	5830	1760	6890	2130	1310	551	644	615
5	11500	2360	4650	4750	4380	1850	10300	2120	1410	539	563	685
6	11200	2590	3580	4160	3320	1760	11400	2830	1250	462	563	491
7	11000	2590	3400	3120	2890	1940	9930	3600	1430	443	583	542
8	9700	5660	3890	3260	3030	1620	10800	3180	1300	447	583	570
9	8580	7730	3910	6140	3110	1940	12200	3320	1660	462	675	564
10	9020	6260	3370	5700	2870	1960	12700	3080	1790	443	1720	563
11	8620	7920	2730	3720	3090	2000	10100	2940	1310	447	1140	581
12	8620	9640	3170	3850	2720	2030	9000	2930	1470	515	790	698
13	9050	6600	3670	4220	2920	2150	11800	2360	925	443	603	580
14	9370	5600	5250	3890	2940	3210	12400	2440	958	470	636	624
15	8550	4710	13500	3430	2690	7820	12200	3730	878	607	836	700
16	7330	4760	15300	2890	2670	11600	11800	2970	1090	595	780	670
17	7010	5610	12700	2970	2480	11300	11300	3320	800	563	680	718
18	7650	7690	9900	2400	2470	10300	11200	4250	1210	535	734	1000
19	7270	8900	15700	2740	2510	10000	10200	4370	867	615	698	1480
20	6540	6720	13500	2610	2170	11500	9710	4480	658	753	619	2000
21	5290	4930	9900	2840	2300	12600	10600	4690	1350	805	555	2000
22	4240	4260	9340	3660	1940	16000	10500	4440	883	805	579	1590
23	3090	5520	9090	4210	2110	16500	10500	5030	720	878	587	1180
24	3270	6780	9360	4090	2050	15800	10300	5990	603	653	599	1050
25	2850	6250	9720	4290	1960	12100	9500	6240	716	734	527	878
26	2590	6010	10200	4950	2100	9110	8290	6510	1270	734	539	910
27	2570	5050	9600	5790	1960	11000	7910	6400	776	893	547	873
28	2530	4020	9650	6940	2040	12100	6530	5550	1060	753	575	1060
29	2360	3410	9390	6950	---	11100	5320	5550	693	771	424	884
30	2410	3450	9210	6310	---	11100	4460	4450	583	826	414	905
31	2330	---	8800	6120	---	11100	---	4300	---	836	439	---
TOTAL	219940	154480	249200	144110	88720	229080	303940	124330	35720	19235	21069	25805
MEAN	7095	5149	8039	4649	3169	7390	10130	4011	1191	620	680	860
MAX	11900	9640	15700	8230	6910	16500	13000	6510	3010	893	1720	2000
MIN	2330	2010	2730	2400	1940	1620	4460	2120	583	443	414	459

CAL YR 1977 TOTAL 1572545 MEAN 4308 MAX 15700 MIN 506
WTR YR 1978 TOTAL 1615629 MEAN 4426 MAX 16500 MIN 414

04232006 GENESEE RIVER AT CHARLOTTE DOCKS AT ROCHESTER, NY
(National stream-quality accounting network station)

LOCATION.--Lat 43°13'26", long 77°36'59", Monroe County, Hydrologic Unit 04130003, at Charlotte Docks, at the Rochester Cement Corp., in Rochester, 0.4 mi (0.6 km) upstream from Rattlesnake Point, 1.6 mi (2.6 km) upstream from Stutson Street Bridge, and 3.9 mi (6.3 km) downstream from gaging station (04232000) at Rochester.

DRAINAGE AREA.--2,457 mi^2 (6,364 km^2) at station 04232000.

PERIOD OF RECORD.--Water years 1971 to current year.
CHEMICAL DATA: 1971-72 (a), 1974 (b), 1975-78 (c).
MINOR ELEMENTS DATA: 1971-73 (a), 1974-78 (b).
ORGANIC DATA: TOC--1974 (a), 1975 (b), 1977-78 (b).
NUTRIENT DATA: 1971 (a), 1974 (b), 1975-78 (c).
BIOLOGICAL DATA:
Coliform bacteria--1974 (b), 1975-78 (c).
Phytoplankton--1974 (b), 1975-77 (c), 1978 (b).
Periphyton--1975-78 (b).
SEDIMENT DATA: 1974 (b), 1975-78 (c).

REMARKS.--Water-discharge data are based on records for station 04232000 Genesee River at Rochester. Additional water-quality data available from New York State Department of Environmental Conservation.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)
OCT												
12...	1100	E8620	370	7.3	12.0	75	--	12.0	111	K1110	2200	160
NOV												
01...	1100	E2320	565	7.5	10.5	1	--	9.7	87	K950	290	230
APR												
26...	1100	E8290	305	7.4	9.0	2	--	9.5	85	580	K1270	120
MAY												
18...	1100	E11200	450	6.8	14.5	250	--	10.5	104	1340	5500	160
JUN												
14...	1100	E2490	590	7.4	20.5	--	20	8.2	92	480	52	250
JUL												
18...	1100	E617	820	7.7	25.5	--	5.0	8.0	98	62	K8	270
AUG												
23...	1100	E588	580	7.2	25.5	--	9.0	5.5	68	470	K2	210
SEP												
21...	1100	E2000	1100	7.1	18.5	--	8.0	7.3	79	K1100	69	290

DATE	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
OCT												
12...	49	46	9.9	17	2.6	130	0	110	41	26	.1	5.7
NOV												
01...	84	68	15	33	2.8	180	0	150	75	52	.0	30
APR												
26...	32	37	7.3	15	1.8	110	0	90	38	24	.1	3.2
MAY												
18...	40	46	9.8	30	2.1	140	0	110	56	48	.1	3.0
JUN												
14...	--	75	15	39	3.3	--	--	87	90	65	.1	2.0
JUL												
18...	140	81	16	80	4.3	--	--	130	110	130	.2	1.5
AUG												
23...	97	63	12	45	4.5	--	--	110	89	71	.1	1.4
SEP												
21...	160	86	18	120	3.8	--	--	130	140	220	.1	3.1

E Estimated.

K Results based on colony count outside the acceptable range (non-ideal colony count).

04232006 GENESEE RIVER AT CHARLOTTE DOCKS AT ROCHESTER, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)
OCT 12...	222	212	.67	--	--	.63	--	1.3	.14	--	0	0
NOV 01...	361	365	.71	.25	.40	.65	--	1.4	.08	--	--	--
APR 26...	187	181	.60	.10	.39	.49	.29	1.1	.08	.01	--	--
MAY 18...	287	264	.53	.15	.69	.84	--	1.4	.17	--	3	0
JUN 14...	374	--	.40	.17	.42	.59	.54	.99	.14	.12	--	--
JUL 18...	548	501	.61	.18	.32	.50	.23	1.1	.15	.06	2	2
AUG 23...	390	352	.31	.78	1.2	2.0	1.3	2.3	.43	.34	--	--
SEP 21...	687	669	.89	.37	.83	1.2	.96	2.1	.08	.04	1	1

DATE	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)
OCT 12...	--	--	0	0	<10	1	2	0	9	3	5100
NOV 01...	--	--	--	--	--	--	--	--	--	--	--
APR 26...	--	--	--	--	--	--	--	--	--	--	--
MAY 18...	100	0	1	0	20	1	4	0	15	3	13000
JUN 14...	--	--	--	--	--	--	--	--	--	--	--
JUL 18...	0	0	0	0	10	2	0	0	6	5	430
AUG 23...	--	--	--	--	--	--	--	--	--	--	--
SEP 21...	0	0	1	0	20	2	1	0	7	8	770

DATE	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)
OCT 12...	70	9	5	110	10	.5	.5	0	0	--	--
NOV 01...	--	--	--	--	--	--	--	--	--	--	--
APR 26...	--	--	--	--	--	--	--	--	--	--	--
MAY 18...	20	20	1	170	20	<.5	<.5	0	0	1	0
JUN 14...	--	--	--	--	--	--	--	--	--	--	--
JUL 18...	50	5	4	110	60	.5	.5	0	0	0	0
AUG 23...	--	--	--	--	--	--	--	--	--	--	--
SEP 21...	40	3	2	90	50	<.5	<.5	0	0	0	0

04232006 GENESEE RIVER AT CHARLOTTE DOCKS AT ROCHESTER, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)
OCT					
12...	40	10	11	--	--
NOV					
01...	--	--	6.4	--	--
APR					
26...	--	--	8.7	--	--
MAY					
18...	50	0	--	9.2	--
JUN					
14...	--	--	9.2	--	--
JUL					
18...	60	20	--	8.5	1.4
AUG					
23...	--	--	5.5	--	--
SEP					
21...	30	10	--	16	.7

DATE	TIME	SAMP-LING DEPTH (FT)	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	TEMPER-ATURE (DEG C)
OCT					
12...	1010	3.0	45	370	13.0
12...	1015	10	45	365	13.0
12...	1020	17	45	370	13.0
12...	1025	3.0	150	355	13.0
12...	1030	8.0	150	370	13.0
12...	1035	13	150	360	13.0
12...	1045	3.0	255	370	12.5
12...	1050	7.0	255	375	12.5
12...	1055	11	255	370	12.5
NOV					
01...	1005	3.0	45	550	10.5
01...	1010	10	45	565	10.5
01...	1015	17	45	560	10.0
01...	1020	3.0	150	575	10.5
01...	1025	8.0	150	580	10.5
01...	1030	12	150	575	10.0
01...	1050	3.0	255	555	10.5
01...	1055	7.0	255	565	10.5
01...	1100	10	255	565	10.5
APR					
26...	1155	3.0	45	300	9.0
26...	1200	10	45	300	8.5
APR					
26...	1205	15	45	305	8.5
26...	1210	20	45	310	8.5
26...	1215	3.0	150	290	8.5
26...	1220	10	150	295	8.5
26...	1225	15	150	300	8.5
26...	1230	3.0	255	310	9.0
26...	1235	10	255	315	9.0
26...	1240	13	255	315	8.5
MAY					
18...	1005	3.0	40	440	14.5
18...	1010	10	40	450	14.5
18...	1015	15	40	450	14.5
18...	1020	20	40	450	14.5
18...	1030	3.0	150	450	14.5
18...	1035	10	150	450	14.5
18...	1040	13	150	450	14.5
18...	1110	3.0	260	445	14.0
18...	1115	10	260	450	14.0

04232006 GENESEE RIVER AT CHARLOTTE DOCKS AT ROCHESTER, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SAMPLING DEPTH (FT)	SAMPLE LOCATION, CROSS SECTION (FT FM L BANK)	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
MAY					
18...	1120	13	260	450	14.0
JUN					
14...	1000	3.0	40	570	20.0
14...	1005	10	40	580	20.5
14...	1010	15	40	590	21.0
14...	1015	20	40	590	20.5
14...	1030	3.0	150	620	20.5
14...	1035	10	150	615	21.0
14...	1040	15	150	615	21.0
14...	1105	3.0	260	630	20.5
14...	1110	8.0	260	630	20.5
14...	1115	12	260	625	20.5
JUL					
18...	0930	3.0	40	815	25.5
18...	0935	10	40	820	25.5
18...	0940	15	40	820	25.5
18...	0945	20	40	810	25.0
18...	1000	3.0	150	820	25.5
18...	1005	10	150	825	25.5
18...	1010	15	150	820	25.5
18...	1030	3.0	260	825	25.5
JUL					
18...	1035	8.0	260	825	25.5
18...	1040	12	260	825	25.5
AUG					
23...	1000	3.0	40	610	26.0
23...	1005	10	40	605	26.0
23...	1010	15	40	545	25.0
23...	1015	20	40	485	24.0
23...	1040	3.0	15	495	26.0
23...	1045	10	15	470	25.5
23...	1050	14	15	440	24.5
23...	1110	3.0	26	610	25.5
23...	1115	8.0	26	600	25.5
23...	1120	12	26	600	25.0
SEP					
21...	1000	3.0	40	1110	19.0
21...	1005	10	40	1110	18.5
21...	1010	15	40	1110	18.5
21...	1015	20	40	1110	18.5
21...	1030	3.0	15	1080	19.0
SEP					
21...	1035	8.0	15	1050	18.5
21...	1040	12	15	1050	18.5
21...	1055	3.0	26	1000	18.5
SEP					
21...	1100	7.0	26	1100	18.5
21...	1105	11	26	1000	18.5

SUSPENDED-SEDIMENT MEASUREMENTS, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAMFLOW (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)
OCT				
12...	1100	E8620	184	E4280
NOV				
01...	1100	E2320	38	E238
APR				
26...	1100	E8290	135	E3020
MAY				
18...	1100	E11200	176	E5320
JUN				
14...	1100	E2490	25	E168
JUL				
18...	1100	E617	14	E23
AUG				
23...	1100	E588	17	E27
SEP				
21...	1100	E2000	28	E151

E Estimated.

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

PHYTOPLANKTON

DATE TIME	NOV 1.77 1100	MAY 18,78 1100	JUN 14,78 1100
TOTAL CELLS/ML	1100	180	2200
DIVERSITY: DIVISION	1.7	0.9	1.5
.CLASS	1.8	0.9	1.5
..ORDER	2.6	1.5	2.3
...FAMILY	3.1	2.8	2.8
....GENUS	3.4	2.8	3.2

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)						
.CHLOROPHYCEAE						
..CHLOROCOCCALES						
...OOCYSTACEAE						
....ANKISTRODESMUS	68	6	41#	23	29	1
....CHODATELLA	10	1	--	-	--	-
....DICTYOSPHAERIUM	39	3	--	-	--	-
....KIRCHNERIELLA	29	3	--	-	--	-
....OOCYSTIS	--	-	--	-	59	3
...SCENEDESMACEAE						
....SCENEDESMUS	97	9	--	-	290	13
..VOLVOCALES						
...CHLAMYDOMONADACEAE						
....CHLAMYDOMONAS	19	2	--	-	--	-
..ZYGNEMATALES						
...DESMIDIACEAE						
....CLOSTERIUM	--	-	14	8	--	-
....COSMARIUM	--	-	--	-	15	1
CHRYSOPHYTA						
.BACILLARIOPHYCEAE						
..CENTRALES						
...COSCINODISCACEAE						
....CYCLOTELLA	150	13	14	8	59	3
....MELOSIRA	39	3	--	-	180	8
..PENNALES						
...CYMBELLACEAE						
....CYMBELLA	10	1	14	8	15	1
...DIATOMACEAE						
....DIATOMA	--	-	14	8	--	-
...FRAGILARIACEAE						
....ASTERIONELLA	--	-	--	-	230	11
....FRAGILARIA	--	-	--	-	230	11
....SYNEDRA	110	9	41#	23	15	1
...GOMPHONEMATACEAE						
....GOMPHONEMA	--	-	14	8	--	-
...NAVICULACEAE						
....NAVICULA	29	3	27#	15	59	3
...NITZSCHIACEAE						
....NITZSCHIA	19	2	--	-	130	6
...SURIRELLACEAE						
....SURIRELLA	19	2	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)						
.CYANOPHYCEAE						
..CHROCCOCCALES						
...CHROCCOCCAEAE						
....ANACYSTIS	190#	16	--	-	350#	16
..HORMOGONALES						
...NOSTOCACEAE						
....ANABAENA	--	-	--	-	530#	24
...OSCILLATORIACEAE						
....LYNGBYA	270#	24	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)						
.CRYPTOPHYCEAE						
..CRYPTOMONIDALES						
...CRYPTOCHRYSIDACEAE						
....CHROOMONAS	29	3	--	-	--	-
.EUGLENOPHYCEAE						
..EUGLENALES						
...EUGLENACEAE						
....EUGLENA	19	2	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

04232006 GENESEE RIVER AT CHARLOTTE DOCKS AT ROCHESTER, NY--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

PERIPHYTON

Dates of exposure	Length of exposure (days)	Biomass (g/m^2)		Chlorophyll a (mg/m^2)	Chlorophyll b (mg/m^2)	Sampling method
		Dry weight	Ash weight			
June 14 to July 18	34	54.6	44.8	217	37.9	Polyethylene strip
July 18 to Aug. 23	36	24.4	20.1	34.6	4.11	Polyethylene strip
Aug. 23 to Sept. 21	29	1.50	1.10	.000	.000	Polyethylene strip

04232047 IRONDEQUOIT CREEK AT EAST ROCHESTER, NY

LOCATION.--Lat 43°07'15", long 77°28'38", Monroe County, Hydrologic Unit 04140101, on left bank 200 ft (61 m) upstream from bridge on Linden Avenue, 2.2 mi (3.5 km) upstream from Allen Creek, and 6.9 mi (11.1 km) upstream from mouth.

DRAINAGE AREA.--92.8 mi² (240 km²).

PERIOD OF RECORD.--August 1973 to current year.

GAGE.--Water-stage recorder. Datum of gage is 341.46 ft (104.077 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except those for winter periods, which are poor.

AVERAGE DISCHARGE.--5 years, 110 ft³/s (3.115 m³/s), 16.10 in/yr (409 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,480 ft³/s (41.9 m³/s) Oct. 29, 1974, gage height, 15.64 ft (4.767 m), result of dewatering of Erie (Barge) Canal through accidental break in canal wall at Bushnell Basin. Minimum, 25 ft³/s (0.71 m³/s) Sept. 9-11, 1975, gage height, 11.27 ft (3.435 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 570 ft³/s (16 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 15	--	720	20.4	--	--
Mar. 16	0630	665	18.8	13.92	4.243
Mar. 22	1715	*842	23.8	*14.35	4.374

Minimum discharge, 26 ft³/s (0.74 m³/s) Sept. 7, 8, 10, gage height 11.30 ft (3.444 m).

REVISIONS.--The minimum discharge for water year 1977 has been revised to a minimum daily discharge of about 30 ft³/s (0.85 m³/s) July 27, 28, 1977; revised daily discharges, in cubic feet per second during the months of June and July 1977, are given below. These figures supersede those published in the report for 1977.

Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge
June 22	42	July 1	46	July 10	47	July 21	36
23	41	2	44	11	45	22	34
24	40	3	43	12	76	23	37
25	76	4	43	16	40	24	35
26	58	6	84	17	38	25	33
27	52	7	70	18	39	26	31
28	47	8	86	19	40	27	30
29	51	9	49	20	38	28	30
30	48					29	52

Month	Total	Mean	Max	Min
June 1977	1,479	49.3	76	40
July 1977	1,502	48.5	91	30
WTR YR 1977	30,934	84.8	447	30

04232047 IRONDEQUOIT CREEK AT EAST ROCHESTER, NY--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	192	68	380	99	170	84	244	77	61	33	38	31
2	325	68	180	95	170	82	230	77	59	33	37	30
3	381	68	150	95	160	85	169	74	59	35	52	31
4	288	107	120	92	150	85	172	77	57	41	50	33
5	177	118	100	89	140	85	367	107	59	38	40	30
6	133	106	86	88	130	82	242	133	57	37	37	28
7	112	102	98	86	120	84	217	112	70	34	37	27
8	102	117	110	140	120	84	183	99	89	33	37	27
9	209	115	100	339	120	82	144	132	65	33	36	28
10	223	129	96	208	110	85	128	123	59	34	34	26
11	146	198	96	217	110	84	123	102	56	33	33	32
12	122	153	98	185	100	85	122	95	54	32	33	75
13	107	148	98	112	100	96	112	113	56	31	32	42
14	93	148	450	98	100	232	101	105	54	32	32	31
15	95	151	680	90	100	575	93	102	50	33	50	32
16	98	173	520	82	96	608	92	95	49	33	75	57
17	317	190	350	82	92	385	86	157	49	36	44	58
18	295	218	280	80	90	293	84	142	49	35	37	99
19	181	200	400	78	92	278	101	110	48	33	37	208
20	133	136	300	78	92	342	214	99	46	33	43	79
21	112	127	320	76	90	526	385	98	57	62	36	53
22	101	124	260	80	88	808	271	89	72	43	34	45
23	93	114	190	64	86	749	171	82	48	37	32	42
24	86	107	170	90	84	582	140	78	43	34	33	41
25	83	101	250	101	82	314	132	75	40	39	35	39
26	81	104	140	258	82	288	122	74	39	47	35	39
27	78	102	120	263	82	465	112	72	38	67	33	39
28	75	96	110	249	82	388	86	70	37	46	35	41
29	73	95	107	232	---	320	82	69	39	40	34	38
30	70	90	106	210	---	253	78	68	34	40	32	37
31	68	---	101	190	---	221	---	64	---	40	32	---
TOTAL	4649	3773	6566	4266	3038	8730	4803	2970	1593	1177	1185	1418
MEAN	150	126	212	138	109	282	160	95.8	53.1	38.0	38.2	47.3
MAX	381	218	680	339	170	808	385	157	89	67	75	208
MIN	68	68	86	76	82	82	78	64	34	31	32	26
CFSM	1.62	1.36	2.28	1.49	1.18	3.04	1.72	1.03	.57	.41	.41	.51
IN.	1.86	1.51	2.63	1.71	1.22	3.50	1.93	1.19	.64	.47	.48	.57

CAL YR 1977 TOTAL 38334 MEAN 105 MAX 680 MIN 30 CFSM 1.13 IN 15.37
WTR YR 1978 TOTAL 44168 MEAN 121 MAX 808 MIN 26 CFSM 1.30 IN 17.71

04232050 ALLEN CREEK NEAR ROCHESTER, NY

LOCATION.--Lat 43°07'49", long 77°31'08", Monroe County, Hydrologic Unit 04140101, on right bank 525 ft (160 m) downstream from Penn Central Transportation Co. bridge, near Rochester, and about 1 mi (2 km) upstream from Irondequoit Creek.

DRAINAGE AREA.--30.1 mi^2 (78.0 km^2), flow from 2.1 mi^2 (5.44 km^2) not contributing.

PERIOD OF RECORD.--November 1959 to current year.

REVISED RECORDS.--WRD NY 1974: 1972(M), 1973(M, P). WDR NY-76-1: 1960-75 (M,P), 1960-63, 1972-74.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 323.54 ft (98.615 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair. Discharge includes undetermined diversion from Erie (Barge) Canal upstream from station.

AVERAGE DISCHARGE.--18 years (1960-78), 33.6 ft^3/s (0.952 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,280 ft^3/s (92.9 m^3/s) May 17, 1974, gage height, 7.42 ft (2.262 m); minimum daily discharge; 1.7 ft^3/s (0.048 m^3/s) Jan. 24, 1963; minimum gage height, 1.16 ft (0.354 m) Feb. 19, 1962.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 450 ft^3/s (12.7 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Dec. 15	0200	774	21.9	4.58	1.396	Mar. 21	2000	*889	25.2	*4.74	1.445
Dec. 18	2245	533	15.1	4.21	1.283	Sept. 18	2345	515	14.6	4.18	1.274
Mar. 14	2400	581	16.5	4.29	1.308						

Minimum discharge, 12 ft^3/s (0.34 m^3/s) Apr. 18, 19, gage height, 2.12 ft (0.646 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	157	31	183	18	46	17	66	31	31	26	30	26
2	142	30	57	18	42	17	43	30	31	27	27	25
3	180	30	40	18	39	16	31	30	29	28	71	26
4	80	66	31	17	36	16	55	29	27	30	35	26
5	53	62	22	17	33	16	123	44	29	28	35	26
6	44	43	24	17	30	16	45	44	31	26	34	26
7	39	56	24	23	29	16	62	35	47	26	29	27
8	39	60	25	90	28	16	38	34	51	26	29	26
9	166	56	26	155	26	17	29	63	32	27	28	25
10	72	72	24	60	25	18	25	45	29	27	28	24
11	49	110	29	64	25	25	24	35	26	27	26	27
12	50	76	30	42	24	27	23	35	25	26	26	82
13	41	68	34	36	23	36	19	36	29	26	26	30
14	37	68	372	28	22	215	17	35	27	27	26	29
15	36	74	509	25	21	382	15	35	28	27	46	31
16	41	110	157	24	20	166	14	38	30	27	40	40
17	250	120	93	23	20	107	13	60	29	26	29	43
18	150	84	192	22	19	78	13	40	28	27	29	80
19	110	56	222	21	19	125	24	38	29	26	29	130
20	86	47	95	21	19	125	137	35	29	26	35	34
21	72	51	114	21	18	427	152	36	32	58	27	30
22	62	47	81	22	18	341	56	33	30	32	26	30
23	54	43	59	24	17	396	34	34	29	33	26	28
24	49	42	50	26	17	119	27	33	27	29	27	27
25	44	40	121	34	17	62	23	32	27	41	27	28
26	41	44	56	149	17	80	21	31	27	35	26	29
27	38	40	30	110	17	144	35	31	27	62	26	29
28	36	40	23	86	17	90	35	29	27	31	30	32
29	35	40	20	73	---	74	31	29	26	30	27	28
30	33	41	19	61	---	55	31	28	26	29	26	26
31	32	---	18	50	---	49	---	29	---	29	26	---
TOTAL	2318	1747	2780	1395	684	3288	1261	1117	895	945	952	1070
MEAN	74.8	58.2	89.7	45.0	24.4	106	42.0	36.0	29.8	30.5	30.7	35.7
MAX	250	120	509	155	46	427	152	63	51	62	71	130
MIN	32	30	18	17	17	16	13	28	25	26	26	24

CAL YR 1977 TOTAL 16295.2 MEAN 44.6 MAX 509 MIN 3.5
WTR YR 1978 TOTAL 18452.0 MEAN 50.6 MAX 509 MIN 13

430927077313700 (042320502) IRONDEQUOIT CREEK AT BROWNCROFT BOULEVARD, ROCHESTER, NY

LOCATION.--Lat 43°09'27", long 77°31'37", Monroe County, Hydrologic Unit 04140101, on right bank 200 ft (61 m) downstream from bridge on Browncroft Boulevard, and 1.5 mi (2.4 km) downstream from bridge on Blossom Road, Rochester.

DRAINAGE AREA.--142 mi^2 (368 km^2).

PERIOD OF RECORD.--Water years 1977 to current year.
CHEMICAL DATA: 1977-78 (b).
NUTRIENT DATA: 1977-78 (b).
BIOLOGICAL DATA:
Coliform bacteria--1977-78 (b).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: January 1977 to current year.
WATER TEMPERATURE: January 1977 to current year.

INSTRUMENTATION.--Water-quality monitor since January 1977.

REMARKS.--Water-discharge measurements are made at bridge on Blossom Road. Water-quality samples are collected at bridge on Blossom Road when stream discharge exceeds 300 ft^3/s (8.50 m^3/s).

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum recorded, 2,300 micromhos Feb. 13, 1977; minimum recorded, 357 micromhos Sept. 25, 1977.
WATER TEMPERATURES: Maximum recorded, 28.0°C July 20, 22, 23, 1978; minimum, freezing point on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum recorded, 1,500 micromhos Aug.16; minimum recorded, 449 micromhos July 22.
WATER TEMPERATURES: Maximum recorded, 28.0°C July 20, 22, 23; minimum, freezing point on many days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	PH (UNITS)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
DEC , 1977 12...	1400	191	7.3	12.6	86	K990	110	850	370	130	100	30
MAR , 1978 15...	1300	901	7.3	12.6	89	K16000	K16000	6300	190	60	52	15
JUN 07...	1100	90	7.5	8.8	91	3200	570	130	440	230	130	28
SEP 13...	1000	85	7.4	8.8	89	K9100	2400	4700	360	190	100	26

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)
DEC , 1977 12...	64	3.6	300	0	250	120	110	.2	8.6	584	1.9
MAR , 1978 15...	65	3.5	160	0	130	47	100	.1	5.8	367	.84
JUN 07...	50	2.7	250	0	210	190	91	.2	6.6	622	.79
SEP 13...	42	3.2	200	0	160	170	80	.2	6.9	527	.94

DATE	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)
DEC , 1977 12...	.03	1.9	.67	1.2	1.9	3.8	.40	--	.29	480	120
MAR , 1978 15...	.01	.85	.27	1.3	1.6	2.5	.29	.04	.05	5200	240
JUN 07...	.02	.81	.05	.50	.55	1.4	.13	.02	.02	1000	100
SEP 13...	.02	.96	.07	.71	.78	1.7	.21	--	.06	1600	120

K Results based on colony count outside the acceptable range (non-ideal colony count).

430927077313700 (042320502) IRONDEQUOIT CREEK AT BROWNCROFT BOULEVARD, ROCHESTER, NY--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	889	540	704	1110	1050	1080	1010	711	841	1020	971	994
2	607	529	573	1090	1040	1070	718	666	689	1110	982	1020
3	578	512	541	1080	1040	1060	792	702	751	1110	1020	1050
4	713	578	630	1100	829	969	852	781	825	1080	990	1040
5	751	632	676	1050	834	956	852	838	844	---	---	---
6	816	741	781	1030	971	1000	920	841	872	---	---	---
7	841	798	816	1020	933	988	972	922	947	---	---	---
8	841	788	807	986	925	951	1020	974	995	---	---	---
9	819	470	647	1000	944	968	1020	977	1000	---	---	---
10	698	562	644	983	755	926	1020	993	1000	---	---	---
11	895	700	819	862	713	812	990	948	968	---	---	---
12	914	819	867	960	813	854	950	922	936	1060	988	1020
13	929	886	904	1160	955	1040	1170	943	1010	1120	1020	1060
14	942	886	914	1040	922	958	1270	889	1090	1100	1060	1070
15	951	895	920	952	890	919	882	695	754	1110	1050	1070
16	942	863	910	888	834	851	693	625	644	1080	1040	1060
17	---	---	---	851	740	803	713	639	674	1230	1040	1070
18	---	---	---	803	762	784	779	715	742	1090	1030	1060
19	---	---	---	782	751	763	745	672	703	1090	1040	1070
20	---	---	---	826	765	789	742	688	709	1080	1040	1060
21	---	---	---	846	819	834	827	745	776	1080	1020	1040
22	---	---	---	880	849	861	849	788	822	1060	1000	1030
23	---	---	---	890	870	879	835	788	817	1070	997	1020
24	---	---	---	916	887	901	871	837	851	1110	997	1030
25	---	---	---	916	895	905	873	764	835	1240	1000	1070
26	---	---	---	915	890	900	796	715	744	1250	878	1110
27	---	---	---	958	892	913	889	796	848	906	818	862
28	1120	1060	1090	1050	955	984	958	889	916	869	756	795
29	1110	1060	1080	1090	1040	1070	1040	961	987	816	754	783
30	1100	1050	1070	1060	1010	1010	1050	985	1020	1000	790	863
31	1100	1050	1070	---	---	---	1020	987	1000	1040	968	993
MONTH	1120	470	823	1160	713	927	1270	625	858	1250	754	1010

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	1030	955	989	1070	1010	1030	---	---	---	917	875	893
2	988	946	968	1040	965	999	---	---	---	948	822	871
3	1080	955	1000	1060	937	990	---	---	---	875	837	857
4	1060	997	1020	1130	955	1010	---	---	---	911	869	887
5	1050	724	935	1110	975	1030	---	---	---	906	702	858
6	1060	946	987	1090	1000	1030	---	---	---	858	778	814
7	1060	1010	1030	1070	962	1020	---	---	---	824	788	802
8	1080	1000	1040	1090	971	1010	---	---	---	827	795	806
9	---	---	---	1070	981	1020	---	---	---	870	777	826
10	---	---	---	1110	991	1050	---	---	---	914	791	869
11	---	---	---	1170	1080	1110	---	---	---	904	840	881
12	---	---	---	1170	1110	1140	---	---	---	961	906	930
13	---	---	---	1240	1140	1170	1010	782	889	945	810	870
14	---	---	---	1310	709	1130	1050	965	991	908	742	821
15	---	---	---	---	---	---	1060	979	1010	925	882	902
16	1050	931	1010	---	---	---	1100	1020	1060	953	884	910
17	1030	962	994	---	---	---	1090	981	1020	882	679	781
18	1040	965	1000	---	---	---	1100	1000	1060	661	583	608
19	1040	952	981	---	---	---	1090	897	981	741	631	694
20	1030	918	962	---	---	---	939	645	814	730	702	713
21	1020	925	961	---	---	---	666	536	630	725	692	707
22	1060	928	978	---	---	---	745	549	647	704	692	699
23	1080	971	1020	---	---	---	832	737	782	925	693	789
24	1090	994	1030	---	---	---	874	828	851	1050	920	951
25	1120	971	1030	---	---	---	890	855	872	1060	965	981
26	1110	1030	1070	---	---	---	925	856	894	1040	941	977
27	1130	997	1060	---	---	---	954	847	895	1060	944	980
28	1090	1000	1050	---	---	---	896	847	867	1020	944	970
29	---	---	---	---	---	---	903	863	876	1080	956	982
30	---	---	---	---	---	---	908	866	885	1090	950	990
31	---	---	---	---	---	---	---	---	---	1080	967	1020
MONTH	1130	724	1010	1310	709	1050	1100	536	890	1090	583	859

430927077313700 (042320502) IRONDEQUOIT CREEK AT BROWNCROFT BOULEVARD, ROCHESTER, NY--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	1090	953	1020	---	---	---	1160	991	1050	1110	1020	1060
2	1070	957	1000	---	---	---	1130	978	1030	1130	1040	1100
3	1060	970	1020	---	---	---	1200	451	854	1120	998	1060
4	1100	976	1030	---	---	---	931	563	767	1120	1010	1040
5	1080	985	1040	---	---	---	1010	865	949	1150	1010	1080
6	1070	971	1030	---	---	---	898	831	857	1170	1030	1090
7	1100	804	1020	---	---	---	966	867	921	1160	1060	1100
8	802	629	734	---	---	---	1000	941	979	1170	1070	1110
9	834	802	818	---	---	---	1010	983	1000	1170	1040	1110
10	1070	800	895	---	---	---	1000	977	988	1140	1050	1080
11	1190	1070	1110	---	---	---	1050	970	1000	1170	1020	1090
12	1240	1160	1190	---	---	---	1120	1060	1100	1060	587	755
13	1220	1140	1180	---	---	---	1140	1080	1100	937	833	861
14	1190	1110	1150	1100	1040	1080	1130	1060	1090	1010	904	955
15	1220	1090	1140	1080	946	1020	1180	1120	1150	1030	935	971
16	1160	1080	1110	1070	922	990	1500	747	978	1020	740	895
17	1170	1090	1130	990	843	931	922	799	856	---	---	---
18	1190	1110	1140	959	801	866	1030	922	981	---	---	---
19	1210	1130	1160	883	773	819	958	865	903	---	---	---
20	1190	1130	1160	850	775	810	889	745	781	911	834	879
21	1210	1090	1140	990	531	834	1030	798	935	1020	910	968
22	1110	901	1020	953	449	662	1050	899	966	1050	1030	1040
23	1070	922	1010	1020	734	921	1060	942	1030	1050	1020	1030
24	1160	1060	1100	1070	751	912	1080	1050	1070	1050	1010	1030
25	1220	1120	1170	1100	686	990	1070	955	1010	1050	1020	1030
26	1230	1120	1180	1020	655	780	1070	973	1020	1040	1010	1020
27	1270	1180	1220	1040	490	691	1080	983	1020	1030	991	1010
28	---	---	---	1050	701	874	1070	918	993	987	944	967
29	---	---	---	1080	890	971	1080	928	982	995	939	963
30	---	---	---	1120	976	1020	1100	962	1010	993	953	973
31	---	---	---	1140	973	1040	1110	1000	1050	---	---	---
MONTH	1270	629	1070	1140	449	901	1500	451	981	1170	587	1010

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	15.0	14.5	14.5	11.0	8.5	9.5	7.0	5.5	6.5	3.5	2.5	3.0
2	15.0	13.5	14.0	13.0	9.5	11.0	7.0	6.0	6.5	2.5	1.0	2.0
3	13.5	12.5	13.0	14.0	11.5	12.5	6.0	5.0	5.5	1.5	.0	.5
4	13.5	12.5	13.0	14.5	13.5	14.0	5.0	4.0	4.5	2.5	.5	1.5
5	13.5	12.5	13.0	14.0	12.5	13.5	4.0	.0	2.0	5.0	2.5	3.5
6	14.0	13.0	13.5	14.0	12.5	13.0	2.5	.0	1.5	4.5	3.5	4.0
7	13.5	12.0	13.0	14.0	13.5	13.5	2.0	.5	1.5	5.0	3.0	4.0
8	11.5	10.5	11.0	13.5	12.5	13.0	2.0	1.0	1.5	5.5	4.5	5.5
9	13.0	11.5	12.0	13.5	12.0	13.0	2.5	1.0	2.0	4.5	.5	2.0
10	12.5	11.0	12.0	13.0	12.0	12.5	1.5	.0	.5	.5	.0	.5
11	13.0	10.5	11.5	12.0	8.5	10.0	1.0	.0	.0	.5	.0	.0
12	12.5	10.5	11.5	8.5	6.0	7.0	1.0	.0	.5	1.0	.0	.5
13	11.0	9.5	10.5	6.0	5.0	5.5	3.0	1.5	2.5	1.0	.5	1.0
14	10.0	9.0	9.5	6.0	4.5	5.5	3.0	2.0	2.0	1.0	.0	.0
15	11.5	9.5	10.5	7.5	5.5	6.5	2.0	2.0	2.0	.5	.0	.0
16	11.0	9.5	10.5	9.5	7.5	8.0	2.5	2.0	2.5	1.0	.0	.5
17	9.5	7.5	8.0	9.5	8.5	9.0	3.0	2.0	2.5	1.0	.0	.5
18	9.0	7.5	8.0	8.5	7.0	8.0	4.0	2.5	3.0	.5	.0	.0
19	9.5	9.0	9.0	7.0	6.5	6.5	3.0	2.0	2.5	1.5	.5	1.0
20	10.5	9.0	9.5	7.0	6.0	6.5	4.0	2.5	3.0	1.0	.0	.0
21	11.5	9.5	10.5	8.5	7.0	8.0	4.0	3.5	4.0	.0	.0	.0
22	11.5	10.5	11.0	8.0	6.5	7.0	3.5	2.5	3.0	1.0	.0	.5
23	11.0	9.0	9.5	7.0	6.5	6.5	4.0	2.5	3.0	1.0	.0	.5
24	12.0	8.5	10.0	8.0	7.0	7.5	5.0	3.0	4.0	2.0	.0	1.0
25	13.5	11.5	12.5	7.0	6.5	7.0	5.0	2.5	4.5	3.5	2.0	2.5
26	---	---	---	7.0	4.0	6.0	2.5	.5	1.0	3.0	.0	1.5
27	---	---	---	4.0	3.0	3.5	1.0	.5	.5	.5	.0	.0
28	13.5	12.0	13.0	4.5	3.0	3.5	1.5	.0	.5	.5	.0	.0
29	12.0	10.0	11.0	5.0	3.5	4.5	2.5	.5	1.5	.0	.0	.0
30	10.5	9.0	10.0	5.5	3.5	4.5	4.0	2.5	3.0	.5	.0	.0
31	10.0	8.0	9.0	---	---	---	4.5	3.0	3.5	.5	.0	.0
MONTH	15.0	7.5	11.0	14.5	3.0	8.5	7.0	.0	2.5	5.5	.0	1.0

430927077313700 (042320502) IRONDEQUOIT CREEK AT BROWNCROFT BOULEVARD, ROCHESTER, NY--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	.5	.0	.0	4.0	1.0	2.5	9.0	7.0	8.0	9.0	6.5	7.5
2	1.0	.0	.0	2.5	.0	1.0	8.5	5.5	6.5	11.0	6.0	8.5
3	1.0	.0	.0	1.0	.0	.5	6.5	4.5	5.0	12.5	8.5	10.5
4	.5	.0	.0	1.5	.0	.5	8.5	4.5	6.0	12.5	8.5	10.5
5	.0	.0	.0	1.5	.0	.0	10.0	7.5	8.5	11.0	9.5	10.0
6	.0	.0	.0	3.0	.0	.5	8.0	6.0	7.0	10.5	9.5	9.5
7	.0	.0	.0	2.5	.0	.5	8.5	7.0	7.5	13.0	9.5	11.0
8	1.0	.0	.0	3.0	.0	1.0	7.5	5.0	6.0	12.0	10.5	11.5
9	.0	.0	.0	4.5	.0	1.5	7.0	3.0	5.0	14.5	11.0	12.5
10	---	---	---	5.0	.0	2.5	8.0	5.0	6.5	14.0	12.0	13.0
11	---	---	---	4.5	1.0	3.0	9.0	7.0	8.0	16.5	10.5	13.5
12	---	---	---	6.0	3.0	4.5	11.0	7.5	9.0	16.5	14.5	15.0
13	---	---	---	7.0	2.5	5.0	12.5	9.5	11.0	17.0	14.5	15.5
14	---	---	---	5.0	1.5	4.5	10.5	7.0	8.5	16.0	14.5	15.0
15	---	---	---	2.0	1.0	1.5	7.0	4.5	5.0	16.5	13.5	15.0
16	2.5	.0	.5	2.0	.5	1.0	8.5	3.5	6.0	16.5	14.0	15.0
17	3.5	.5	1.5	3.0	.0	1.5	9.0	4.5	7.0	17.0	14.5	15.5
18	1.0	.0	.0	3.5	.5	2.0	10.5	5.0	8.0	17.5	15.0	16.0
19	1.0	.0	.0	5.0	2.0	3.5	9.0	8.0	8.5	20.0	14.0	16.5
20	1.5	.0	.0	4.5	.5	2.5	8.0	6.5	7.5	20.5	16.5	18.5
21	1.0	.0	.0	4.5	2.0	3.5	6.5	3.5	4.0	20.0	17.0	18.5
22	.5	.0	.0	3.0	1.5	2.0	8.0	3.0	5.5	19.5	15.0	17.0
23	2.0	.0	.0	4.5	2.5	3.5	10.5	6.0	8.5	20.0	15.5	17.5
24	4.0	.0	1.5	4.0	3.0	4.0	12.5	7.5	10.0	21.5	18.0	19.0
25	3.0	1.5	2.5	4.0	2.0	3.0	13.5	8.5	11.0	21.5	17.5	19.5
26	2.5	.5	1.5	4.0	2.5	3.5	14.0	9.0	11.5	22.0	18.0	19.5
27	2.5	.5	1.0	3.5	3.0	3.5	14.0	9.5	12.0	23.5	18.5	20.5
28	4.5	.5	2.0	4.0	3.5	3.5	14.0	9.0	12.0	24.0	19.5	21.5
29	---	---	---	5.0	4.0	4.0	14.0	10.0	12.0	24.0	20.0	21.5
30	---	---	---	6.0	4.0	5.0	12.0	9.0	10.5	24.5	20.0	22.0
31	---	---	---	7.5	5.0	6.5	---	---	---	23.5	21.0	22.5
MONTH	4.5	.0	.5	7.5	.0	2.5	14.0	3.0	8.0	24.5	6.0	15.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	22.0	19.5	20.5	---	---	---	23.5	19.0	21.0	21.0	18.5	20.0
2	22.0	19.0	20.5	---	---	---	25.0	21.0	24.0	20.5	17.5	19.0
3	20.0	18.0	19.0	---	---	---	24.5	23.0	23.5	20.0	18.0	19.0
4	19.0	15.5	17.0	---	---	---	23.5	21.5	22.5	20.5	18.0	19.5
5	17.5	15.5	16.5	---	---	---	23.0	20.0	21.0	20.0	18.0	19.0
6	19.5	14.0	16.5	---	---	---	24.0	22.0	23.0	22.0	18.0	20.0
7	18.0	15.5	16.5	---	---	---	23.0	21.0	22.0	21.0	20.0	20.5
8	20.0	17.5	18.5	---	---	---	23.5	21.0	22.5	19.5	17.0	18.0
9	20.0	17.5	18.5	---	---	---	24.0	21.0	22.5	18.5	16.5	17.5
10	20.0	16.0	18.0	---	---	---	24.0	21.0	22.5	17.0	14.5	15.5
11	22.0	17.0	19.5	---	---	---	23.5	20.5	22.0	20.5	16.0	18.0
12	23.0	19.5	21.0	---	---	---	24.0	21.5	22.5	20.5	17.5	19.5
13	22.0	15.0	18.0	---	---	---	24.5	20.5	22.5	17.0	15.5	16.5
14	17.0	13.5	15.0	25.5	21.5	23.5	25.0	21.5	23.5	18.0	15.0	16.5
15	18.0	13.5	15.5	25.5	21.5	23.5	24.5	22.5	23.5	20.0	17.0	18.0
16	18.5	14.5	16.5	25.0	22.0	23.0	25.5	23.0	24.0	19.0	18.0	18.5
17	20.5	17.5	18.5	25.0	21.5	23.0	24.5	22.5	23.0	18.0	16.0	16.5
18	23.0	19.0	21.0	25.0	20.0	23.0	24.0	20.5	22.0	16.5	15.5	16.0
19	23.0	19.5	20.5	25.5	21.5	23.0	25.0	21.0	23.0	17.0	16.0	16.5
20	22.5	17.5	20.0	28.0	23.5	25.0	24.0	22.5	23.0	20.0	16.0	17.5
21	20.5	18.0	19.0	27.5	24.0	26.0	22.0	19.0	21.0	21.5	18.5	19.5
22	20.0	17.5	18.5	28.0	25.5	27.0	22.0	18.0	20.0	19.5	17.0	18.5
23	20.0	17.5	18.5	28.0	25.5	24.5	22.5	19.0	21.0	17.0	15.5	16.5
24	21.0	16.5	18.5	26.0	23.5	25.0	22.0	20.0	21.5	16.5	14.0	15.5
25	21.5	17.0	19.0	25.0	21.0	23.0	21.0	20.0	20.0	16.5	14.5	15.5
26	21.5	19.5	20.0	25.0	23.5	24.0	20.5	18.0	19.5	15.0	13.0	14.0
27	24.5	19.5	21.5	25.5	23.5	24.0	21.0	18.0	19.5	16.5	13.5	15.0
28	---	---	---	24.5	21.5	22.5	22.0	19.5	20.5	16.0	14.0	15.0
29	---	---	---	21.5	19.5	20.5	21.5	20.0	20.5	14.0	12.0	13.0
30	---	---	---	21.5	20.0	20.5	21.5	19.0	20.0	15.5	12.5	13.5
31	---	---	---	20.0	18.0	19.0	21.0	20.0	20.0	---	---	---
MONTH	24.5	13.5	18.5	28.0	18.0	23.5	25.5	18.0	22.0	22.0	12.0	17.5

04232100 STERLING CREEK AT STERLING, NY

LOCATION.--Lat 43°19'31", long 76°38'51", Cayuga County, Hydrologic Unit 04140101, on right bank at Sterling, 25 ft (8 m) downstream from bridge on State Highway 104A, 1.8 mi (2.9 km) southwest of Sterling Valley, and 1.9 mi (3.1 km) upstream from Sterling Valley Creek.

DRAINAGE AREA.--44.4 mi² (115 km²).

PERIOD OF RECORD.--April 1957 to current year.

GAGE.--Water-stage recorder. Datum of gage is 264.69 ft (80.677 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except those for winter periods, which are poor.

AVERAGE DISCHARGE.--21 years, 66.7 ft³/s (1.889 m³/s), 20.40 in/yr (518 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,490 ft³/s (42.2 m³/s) Apr. 4, 1960, gage height, 5.13 ft (1.564 m); minimum, 0.32 ft³/s (0.009 m³/s) Sept. 14, 1966, gage height, 1.50 ft (0.457 m).

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 630 ft³/s (17.8 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Mar. 23	2100	*920	26.1	*a4.52	1.378	Apr. 1	2330	754	21.4	4.23	1.289
Mar. 28	0130	716	20.3	4.17	1.271						

a Backwater from ice.

Minimum discharge, 2.5 ft³/s (0.07 m³/s) Sept. 10, 11, gage height, 1.64 ft (0.500 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	72	34	210	52	140	46	608	36	11	6.3	5.9	4.3
2	137	32	233	50	130	46	608	35	11	5.9	5.9	3.9
3	215	30	198	49	120	45	387	34	14	5.9	5.4	3.6
4	210	165	162	48	110	45	251	33	12	5.9	5.4	3.6
5	148	196	115	51	100	45	340	33	11	5.4	4.7	3.6
6	108	112	82	51	96	44	277	41	11	5.1	4.3	3.6
7	84	121	85	50	90	44	251	47	11	4.7	3.9	3.3
8	71	297	79	82	86	46	198	43	13	4.7	3.9	3.3
9	124	244	74	350	80	47	153	67	12	4.3	3.9	3.0
10	167	233	86	230	76	47	130	78	11	4.7	3.9	2.7
11	153	417	120	270	72	47	117	82	9.9	4.7	3.6	3.0
12	119	314	110	220	68	50	126	50	8.2	5.1	3.6	15
13	95	258	79	170	64	53	110	48	16	4.3	3.9	11
14	84	230	247	140	62	88	95	47	15	4.3	3.6	7.2
15	75	185	574	110	60	177	82	46	12	4.3	4.7	5.9
16	81	175	531	96	58	167	74	43	9.3	4.3	14	5.9
17	170	180	438	82	56	167	67	51	8.2	4.3	13	5.1
18	198	168	340	76	54	172	62	47	7.7	3.9	8.2	5.4
19	185	188	237	70	50	148	60	46	8.8	3.9	6.3	48
20	143	170	190	70	49	160	103	42	9.3	3.9	5.4	38
21	117	162	167	100	48	233	157	24	11	3.9	4.7	25
22	101	162	146	88	48	438	124	39	30	4.7	4.3	16
23	88	141	128	80	47	716	93	38	28	4.3	3.9	12
24	74	124	119	94	47	801	77	35	18	3.6	4.3	8.8
25	64	110	160	82	47	673	64	30	12	3.9	5.1	7.2
26	57	128	180	237	47	417	55	26	9.9	3.3	4.7	6.3
27	50	124	210	359	47	608	50	22	8.8	3.9	4.3	5.4
28	44	113	120	260	47	691	42	19	7.7	5.4	4.7	5.1
29	41	103	72	210	---	637	21	15	7.7	3.6	4.3	5.1
30	37	100	54	180	---	552	36	14	6.7	3.3	4.3	5.1
31	35	---	54	160	---	493	---	12	---	3.9	4.3	---
TOTAL	3347	5036	5600	4167	1999	7943	4818	1223	361.2	139.7	162.4	275.4
MEAN	108	168	181	134	71.4	256	161	39.5	12.0	4.51	5.24	9.18
MAX	215	417	574	359	140	801	608	82	30	6.3	14	48
MIN	35	30	54	48	47	44	21	12	6.7	3.3	3.6	2.7
CFSM	2.43	3.78	4.08	3.02	1.61	5.77	3.63	.89	.27	.10	.12	.21
IN.	2.80	4.22	4.69	3.49	1.67	6.65	4.04	1.02	.30	.12	.14	.23

CAL YR 1977 TOTAL 32595.5 MEAN 89.3 MAX 1110 MIN 2.7 CFSM 2.01 IN 27.31
WTR YR 1978 TOTAL 35071.7 MEAN 96.1 MAX 801 MIN 2.7 CFSM 2.15 IN 29.38

04232400 SENECA LAKE AT WATKINS GLEN, NY

LOCATION.--Lat 42°23'00", long 76°52'05", Schuyler County, Hydrologic Unit 04140201, on east bank about 300 ft (91 m) from lake on shorter of two boat slips at Watkins Glen.

DRAINAGE AREA.--704 mi² (1,823 km²).

PERIOD OF RECORD.--October 1956 to current year.

REVISED RECORDS.--WSP 2112: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (1.59 ft or 0.485 m, Barge Canal datum). Prior to Oct. 1, 1975, at datum 438.41 ft (133.627 m) higher.

REMARKS.--Area of water surface, 67.6 mi² (175 km²). Diversion from Susquehanna River basin enters lake through Keuka Lake Outlet at Dresden. For table of diversion, see station 01528700. Lake regulated by taintor gates on Seneca River at lock 4, Waterloo, for operation of Erie (Barge) Canal and power generation by New York State Electric and Gas Corp.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 448.88 ft (136.819 m) June 25, 1972; minimum, 442.64 ft (134.917 m) Mar. 14, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 446.37 ft (136.054 m) Oct. 2; minimum, 442.64 ft (134.917 m) Mar. 14.

ELEVATION, IN FEET ABOVE NGVD, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	446.23	445.57	445.06	444.88	444.27	443.18	445.18	445.26	444.87	444.84	444.72	444.70
2	446.29	445.52	445.06	444.94	444.27	443.11	445.32	445.29	444.85	444.80	444.76	444.61
3	446.28	445.48	445.05	444.74	444.26	443.06	445.28	445.31	444.88	444.80	444.71	444.60
4	446.29	445.47	445.02	444.65	444.22	443.05	445.26	445.33	444.88	444.84	444.80	444.66
5	446.18	445.45	445.02	444.60	444.16	443.02	445.43	445.30	444.89	444.84	444.76	444.60
6	446.16	445.42	445.02	444.57	444.21	443.00	445.45	445.29	444.87	444.77	444.74	444.57
7	446.15	445.43	444.96	444.47	444.24	442.99	445.52	445.26	444.82	444.71	444.82	444.64
8	445.97	445.51	444.88	444.39	444.14	442.96	445.56	445.19	444.83	444.73	444.77	444.62
9	445.93	445.54	444.80	444.53	444.06	442.91	445.55	445.18	444.85	444.77	444.76	444.65
10	446.04	445.54	444.78	444.67	444.03	442.88	445.51	445.15	444.88	444.79	444.89	444.59
11	445.92	445.78	444.71	444.61	444.00	442.64	445.48	445.10	444.84	444.80	444.88	444.51
12	445.82	445.85	444.62	444.55	443.96	442.82	445.47	445.04	444.80	444.77	445.01	444.68
13	445.83	445.86	444.59	444.51	443.95	442.78	445.44	445.07	444.86	444.69	445.10	444.66
14	445.75	445.79	444.65	444.53	443.90	442.77	445.41	445.13	444.88	444.72	445.06	444.54
15	445.66	445.70	445.01	444.42	443.82	443.00	445.43	445.15	444.82	444.77	445.09	444.53
16	445.64	445.64	445.13	444.35	443.78	443.20	445.47	445.12	444.78	444.74	445.02	444.67
17	446.07	445.66	445.18	444.31	443.76	443.28	445.51	445.13	444.74	444.77	445.03	444.65
18	446.18	445.65	445.20	444.34	443.71	443.29	445.46	445.11	444.75	444.76	445.05	444.73
19	446.17	445.61	445.29	444.26	443.67	443.31	445.42	445.07	444.81	444.68	444.90	444.83
20	446.19	445.53	445.28	444.26	443.61	443.38	445.43	445.04	444.84	444.70	444.97	444.71
21	446.16	445.44	445.31	444.20	443.58	443.53	445.45	445.03	444.84	444.73	444.88	444.69
22	446.11	445.42	445.30	444.12	443.53	444.01	445.44	445.00	444.87	444.74	444.79	444.74
23	446.08	445.36	445.23	444.04	443.47	444.31	445.40	444.96	444.86	444.76	444.79	444.67
24	446.03	445.34	445.20	443.96	443.42	444.54	445.37	444.94	444.88	444.80	444.72	444.61
25	445.95	445.27	445.21	443.98	443.38	444.58	445.33	444.89	444.87	444.70	444.76	444.68
26	445.90	445.24	445.18	444.05	443.34	444.62	445.29	444.65	444.86	444.63	444.69	444.64
27	445.91	445.20	445.11	444.15	443.28	444.81	445.24	444.85	444.86	444.72	444.69	444.52
28	445.87	445.15	445.04	444.25	443.22	444.99	445.19	444.87	444.90	444.79	444.65	444.62
29	445.81	445.10	444.97	444.29	---	445.08	445.20	444.89	444.89	444.75	444.67	444.58
30	445.75	445.01	444.94	444.30	---	445.12	445.25	444.90	444.87	444.81	444.67	444.46
31	445.67	---	444.95	444.29	---	445.14	---	444.88	---	444.78	444.67	---
MEAN	446.00	445.48	445.02	444.39	443.83	443.60	445.39	445.08	444.85	444.76	444.83	444.63
MAX	446.29	445.86	445.31	444.88	444.27	445.14	445.56	445.33	444.90	444.84	445.10	444.83
MIN	445.64	445.01	444.59	443.96	443.22	442.77	445.18	444.85	444.74	444.63	444.65	444.46

CAL YR 1977 MEAN 445.01 MAX 446.35 MIN 443.03
WTR YR 1978 MEAN 444.83 MAX 446.29 MIN 442.77

04232450 KEUKA LAKE AT HAMMONDSPORT, NY

LOCATION.--Lat 42°24'22", long 77°13'08", Steuben County, Hydrologic Unit 04140201, on left bank of Keuka Inlet at end of Liberty Street extension at Hammondsport, and 300 ft (91 m) upstream from mouth.

DRAINAGE AREA.--182 mi^2 (471 km^2).

PERIOD OF RECORD.--August 1960 to current year.

REVISED RECORDS.--WSP 2112: Drainage area. WRD NY 1974: 1973.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to October 1, 1975, at datum 710.00 ft (216.408 m) higher.

REMARKS.--Lake regulated by village of Penn Yan; prior to July 1962, by New York State Electric and Gas Corp. Area of water surface, 18.3 mi^2 (47.4 km^2). During each year, a large part of flow from 45.5 mi^2 (118 km^2) of drainage area of Mud Creek (Susquehanna River basin) is diverted into Keuka Lake for power development. For table of diversion, see station 01528700.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 719.35 ft (219.258 m) June 24, 1972; minimum daily, 711.40 ft (216.835 m) Feb. 2, 3, 1961.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 716.31 ft (218.331 m) April 7, 8; minimum, 713.02 ft (217.328 m) Sept. 30.

ELEVATION, IN FEET ABOVE NGVD, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	715.60	715.32	715.05	714.73	714.65	713.77	715.69	715.15	714.11	714.01	713.97	713.94
2	715.63	715.28	715.02	714.69	714.63	713.73	715.89	715.09	714.10	713.98	713.96	713.90
3	715.63	715.24	714.99	714.64	714.60	713.70	715.88	715.02	714.15	713.99	713.95	713.89
4	715.62	715.25	714.94	714.60	714.57	713.66	715.88	714.95	714.12	714.03	713.99	713.92
5	715.57	715.26	714.93	714.56	714.54	713.62	716.07	714.91	714.09	714.01	713.96	713.88
6	715.55	715.23	714.91	714.52	714.52	713.58	716.11	714.88	714.06	714.01	713.98	713.85
7	715.53	715.27	714.85	714.47	714.54	713.55	716.21	714.82	714.02	714.00	713.99	713.83
8	715.47	715.44	714.79	714.45	714.53	713.52	716.26	714.75	714.06	713.99	713.98	713.76
9	715.46	715.49	714.72	714.68	714.49	713.48	716.24	714.72	714.13	714.01	713.98	713.72
10	715.51	715.50	714.67	714.74	714.46	713.45	716.19	714.69	714.15	714.01	714.06	713.61
11	715.47	715.70	714.60	714.71	714.42	713.42	716.15	714.64	714.14	714.00	714.08	713.52
12	715.42	715.73	714.53	714.68	714.39	713.40	716.13	714.60	714.14	713.97	714.63	713.53
13	715.41	715.72	714.50	714.67	714.36	713.38	716.09	714.61	714.22	713.95	714.65	713.47
14	715.38	715.68	714.58	714.67	714.32	713.42	716.03	714.61	714.23	713.96	714.59	713.35
15	715.34	715.62	714.86	714.62	714.29	713.66	715.97	714.60	714.21	713.99	714.53	713.27
16	715.35	715.60	714.96	714.57	714.25	713.84	715.91	714.59	714.20	713.99	714.45	713.28
17	715.60	715.63	714.98	714.57	714.22	713.92	715.86	714.67	714.17	714.01	714.38	713.25
18	715.71	715.65	715.00	714.62	714.18	713.95	715.79	714.67	714.17	713.97	714.33	713.25
19	715.75	715.63	715.11	714.58	714.14	713.98	715.73	714.64	714.24	713.90	714.24	713.26
20	715.76	715.58	715.11	714.60	714.10	714.03	715.71	714.60	714.23	713.92	714.21	713.24
21	715.74	715.52	715.14	714.57	714.06	714.16	715.72	714.59	714.23	713.97	714.13	713.25
22	715.72	715.49	715.13	714.53	714.02	714.61	715.68	714.56	714.24	713.98	714.05	713.27
23	715.71	715.43	715.09	714.49	713.98	714.93	715.63	714.51	714.18	713.99	713.99	713.24
24	715.65	715.39	715.07	714.44	713.94	715.20	715.59	714.47	714.14	714.02	713.97	713.22
25	715.60	715.33	715.08	714.42	713.91	715.26	715.53	714.43	714.07	713.92	713.98	713.22
26	715.57	715.28	715.08	714.47	713.87	715.28	715.48	714.39	714.02	713.88	713.95	713.19
27	715.54	715.22	715.02	714.62	713.84	715.34	715.42	714.32	714.02	713.96	713.95	713.16
28	715.52	715.15	714.95	714.70	713.80	715.44	715.36	714.25	714.03	714.02	713.92	713.17
29	715.48	715.09	714.88	714.72	---	715.52	715.29	714.19	714.02	713.98	713.94	713.14
30	715.44	715.02	714.82	714.71	---	715.54	715.22	714.14	714.03	714.02	713.94	713.11
31	715.38	---	714.79	714.68	---	715.58	---	714.11	---	713.98	713.95	---
MEAN	715.55	715.42	714.91	714.60	714.27	714.19	715.82	714.62	714.13	713.98	714.12	713.46
MAX	715.76	715.73	715.14	714.74	714.65	715.58	716.26	715.15	714.24	714.03	714.65	713.94
MIN	715.34	715.02	714.50	714.42	713.80	713.38	715.22	714.11	714.02	713.88	713.92	713.11

CAL YR 1977 MEAN 714.31 MAX 715.76 MIN 712.38
WTR YR 1978 MEAN 714.59 MAX 716.26 MIN 713.11

04232482 KEUKA LAKE OUTLET AT DRESDEN, NY

LOCATION.--Lat 42°40'49", long 76°57'15", Yates County, Hydrologic Unit 04140201, on right bank at upstream side of bridge on Milo Street in Dresden, and 0.4 mi (0.6 km) upstream from mouth.

DRAINAGE AREA.--207 mi² (536 km²).

PERIOD OF RECORD.--April 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 446.67 ft (136.145 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair. Flow regulated by village of Penn Yan. During each year a large part of flow from 45.5 mi² (118 km²) of Mud Creek drainage area (Susquehanna River basin) is diverted into Keuka Lake (Oswego River basin) for power development. For table of diversion, see station 01528700.

AVERAGE DISCHARGE.--13 years, 214 ft³/s (6.060 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,000 ft³/s (113 m³/s) June 22, 1972, gage height, 8.37 ft (2.551 m), from rating curve extended above 2,100 ft³/s (59.5 m³/s) on basis of contracted-opening measurement at Mays Mills, adjusted for intervening area; minimum daily, 12 ft³/s (0.34 m³/s) July 16, 1967.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,460 ft³/s (41.3 m³/s) Mar. 21, gage height, 3.94 ft (1.201 m); minimum, 16 ft³/s (0.45 m³/s) Sept. 5, gage height, 0.25 ft (.076 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	476	402	552	476	467	360	678	499	135	29	23	27
2	441	432	512	467	459	360	631	491	136	28	25	26
3	432	428	494	450	454	369	619	484	138	30	28	27
4	415	432	485	440	450	352	638	475	137	31	27	26
5	394	428	481	430	476	356	697	476	136	29	26	28
6	373	424	465	428	441	356	647	476	200	29	27	102
7	373	459	472	428	450	344	691	465	234	42	27	306
8	369	579	472	463	441	336	652	458	58	28	27	299
9	419	588	476	606	467	344	635	462	39	28	54	292
10	390	705	454	424	441	324	626	453	35	25	50	292
11	373	759	450	489	432	320	637	376	34	24	30	289
12	360	602	450	512	437	316	637	323	35	24	346	278
13	352	588	463	472	424	320	632	329	62	24	420	268
14	348	575	687	459	411	463	626	328	40	25	413	269
15	344	566	822	454	437	782	616	327	35	25	404	265
16	364	557	606	441	410	584	603	418	37	25	395	259
17	732	597	534	445	411	494	598	529	34	24	390	252
18	428	602	597	445	419	454	588	489	34	22	379	254
19	390	575	602	441	400	485	579	477	112	21	376	138
20	377	561	579	440	420	469	595	473	167	20	356	27
21	373	561	579	440	400	922	605	479	211	24	345	25
22	424	539	570	437	390	878	582	472	312	21	338	23
23	415	530	543	441	381	824	569	467	331	20	236	23
24	407	521	525	424	381	632	562	458	364	21	27	22
25	407	516	602	424	377	575	549	448	359	22	25	22
26	398	525	530	507	373	648	538	439	218	22	24	21
27	390	498	512	548	373	787	531	429	132	26	27	21
28	390	498	512	516	369	653	525	422	95	32	29	21
29	390	485	494	503	---	631	516	416	32	24	29	18
30	385	461	485	485	---	622	507	329	30	25	28	20
31	381	---	481	476	---	627	---	137	---	23	28	---
TOTAL	12510	16013	16506	14411	11791	16007	18109	13304	3922	793	4959	3940
MEAN	404	534	532	465	421	516	604	429	131	25.6	160	131
MAX	732	759	822	606	476	922	697	529	364	42	420	306
MIN	344	402	450	424	369	316	507	137	30	20	23	18

CAL YR 1977 TOTAL 86497 MEAN 237 MAX 965 MIN 17
WTR YR 1978 TOTAL 132265 MEAN 362 MAX 922 MIN 18

04233000 CAYUGA INLET NEAR ITHACA, NY

LOCATION.--Lat 42°23'35", long 76°32'43", Tompkins County, Hydrologic Unit 04140201, on left bank 0.8 mi (1.3 km) upstream from Enfield (formerly Butternut) Creek, and 5 mi (8 km) south of Ithaca.

DRAINAGE AREA.--35.2 mi² (91.2 km²).

PERIOD OF RECORD.--March 1937 to current year.

REVISED RECORDS.--WSP 2112: Drainage area. WRD NY 1974: 1973.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 437.16 ft (133.246 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Records good except those for winter periods, which are poor.

AVERAGE DISCHARGE.--41 years, 39.0 ft³/s (1.104 m³/s), 15.05 in/yr (382 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,800 ft³/s (136 m³/s) June 23, 1972, gage height, 8.10 ft (2.469 m), from rating curve extended above 1,600 ft³/s (45.3 m³/s) on basis of slope-area measurements at gage heights 5.5 ft (1.68 m) and 7.58 ft (2.310 m); minimum, 1.7 ft³/s (0.048 m³/s) July 22, 1955; minimum gage height, 0.42 ft (0.128 m) Aug. 30, 31, Sept. 1, 2, 1939, July 22, 1955.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 700 ft³/s (19.8 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 17	0530	1,170	33.1	3.96	1.207	Mar. 21	2200	762	21.6	3.09	0.942
Nov. 10	2400	833	23.6	3.23	0.985	Mar. 27	1515	853	24.2	3.27	0.997
Jan. 9	0345	*1,320	37.4	*4.12	1.256						

Minimum discharge, 3.7 ft³/s (0.10 m³/s) Sept. 30; minimum gage height, 0.54 ft (0.165 m) Sept. 6-8, 14, 15, 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	66	34	162	46	68	24	319	34	19	7.6	8.4	7.6
2	69	33	94	41	62	24	254	33	19	7.6	7.2	6.4
3	81	32	77	37	60	23	157	31	23	9.2	9.7	6.4
4	69	131	69	36	52	21	165	30	20	19	11	6.0
5	50	141	58	38	50	20	283	46	19	13	8.4	5.7
6	46	94	64	37	54	19	168	51	17	9.7	22	5.3
7	40	131	58	37	49	18	213	41	20	8.4	22	4.9
8	34	220	54	80	47	17	165	35	35	8.0	27	6.4
9	88	131	53	544	46	15	127	55	34	8.0	16	6.8
10	66	216	47	165	42	18	109	45	22	7.6	24	5.7
11	49	327	40	100	44	22	104	39	17	7.2	13	6.4
12	43	154	40	94	44	29	109	36	15	6.8	12	6.8
13	38	122	57	74	42	38	92	35	23	6.4	11	6.4
14	34	107	203	68	37	131	81	45	16	6.8	8.4	5.7
15	35	96	272	62	31	210	71	39	14	7.6	8.0	5.3
16	113	87	159	56	31	131	66	42	13	8.0	7.6	6.0
17	665	79	122	50	32	98	61	74	12	8.4	7.2	6.4
18	223	76	127	47	30	81	55	50	12	6.8	6.8	8.4
19	247	67	124	45	27	92	54	45	12	6.4	6.4	11
20	223	60	109	45	27	96	76	41	12	6.0	7.2	8.0
21	134	57	100	43	25	335	85	46	15	12	6.4	6.8
22	104	51	90	42	27	403	63	38	19	13	6.0	5.7
23	85	47	80	41	27	360	55	33	12	8.4	5.7	4.9
24	72	47	74	44	27	236	51	32	11	7.6	5.7	4.6
25	64	43	129	50	27	151	47	30	9.7	7.2	6.0	4.3
26	58	51	78	331	27	157	45	27	9.7	6.8	6.0	4.3
27	53	43	56	220	25	525	42	25	10	11	5.3	4.3
28	47	42	52	151	24	364	40	23	10	13	5.7	4.3
29	43	41	50	115	---	257	38	22	9.2	9.2	6.8	4.0
30	40	46	52	90	---	188	35	20	8.4	8.4	5.7	4.0
31	36	---	54	78	---	185	---	19	---	8.0	9.7	---
TOTAL	3015	2806	2804	2897	1084	4288	3230	1162	488.0	273.1	312.3	178.8
MEAN	97.3	93.5	90.5	93.5	38.7	138	108	37.5	16.3	8.81	10.1	5.96
MAX	665	327	272	544	68	525	319	74	35	19	27	11
MIN	34	32	40	36	24	15	35	19	8.4	6.0	5.3	4.0
CFSM	2.76	2.66	2.57	2.66	1.10	3.92	3.07	1.07	.46	.25	.29	.17
IN.	3.19	2.97	2.96	3.06	1.15	4.53	3.41	1.23	.52	.29	.33	.19

CAL YR 1977 TOTAL 20028.6 MEAN 54.9 MAX 665 MIN 5.0 CFSM 1.56 IN 21.17
WTR YR 1978 TOTAL 22538.2 MEAN 61.7 MAX 665 MIN 4.0 CFSM 1.75 IN 23.82

04233500 CAYUGA LAKE AT ITHACA, NY

LOCATION.--Lat 42°26'45", long 76°30'45", Tompkins County, Hydrologic Unit 04140201, on left bank of natural channel 40 ft (12 m) upstream from flood-control channel of Cayuga Inlet, at north end of Taughannock Boulevard, and 1 mi (2 km) upstream from mouth of Inlet, at Ithaca.

DRAINAGE AREA.--1,564 mi² (4,051 km²); Cayuga Lake portion, 785 mi² (2,033 km²).

PERIOD OF RECORD.--August 1905 to December 1909, August 1956 to current year in reports of Geological Survey. January 1910 to September 1925 in reports of State Engineer and Surveyor.

REVISED RECORDS.--WSP 2112: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (1.43 ft or 0.436 m, Barge Canal datum). Prior to September 1925, nonrecording gage at several sites within 1 mi (2 km) of present site. Prior to October 1968, at datum 378.57 ft (115.388 m) higher. October 1968 to September 1975, at datum 376.57 ft (114.779 m) higher.

REMARKS.--Lake regulated at Mud Lock by New York State Department of Transportation. Area of water surface, 66.9 mi² (173 km²). Seneca River (Cayuga and Seneca Canal) enters lake 0.5 mi (0.8 km) upstream from Mud Lock and is included in first drainage area given above.

EXTREMES FOR PERIOD OF RECORD.--(1905-25 and since 1956): Maximum elevation, 386.33 ft (117.753 m) June 26, 1972; minimum daily, 377.64 ft (115.105 m) present datum, Mar. 28, 1960.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 383.87 ft (117.004 m) Oct. 17; minimum daily, 378.19 ft (115.272 m) Mar. 13.

ELEVATION, IN FEET ABOVE NGVD, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	383.65	381.89	381.65	381.67	380.52	378.46	382.63	381.88	382.54	382.28	381.92	381.68
2	383.65	381.79	381.77	381.51	380.50	378.43	382.87	381.87	382.56	382.21	381.92	381.60
3	383.65	381.76	381.78	381.36	380.49	378.39	382.74	381.86	382.54	382.16	381.89	381.58
4	383.66	381.82	381.76	381.20	380.45	378.36	382.66	381.85	382.51	382.20	382.02	381.65
5	383.59	381.80	381.73	381.05	380.40	378.33	382.93	381.92	382.48	382.22	381.94	381.55
6	383.49	381.76	381.75	380.94	380.35	378.31	382.92	382.05	382.44	382.19	381.94	381.53
7	383.42	381.71	381.70	380.8[illegible]	380.32	378.28	382.97	382.17	382.46	382.18	381.99	381.59
8	383.24	381.76	381.53	380.62	380.27	378.26	383.01	382.17	382.52	382.20	381.93	381.50
9	383.05	381.81	381.32	380.91	380.20	378.24	382.92	382.33	382.52	382.23	381.96	381.54
10	383.09	381.86	381.29	381.10	380.13	378.23	382.77	382.39	382.40	382.24	382.10	381.40
11	383.05	382.07	381.14	381.14	380.03	378.22	382.67	382.38	382.40	382.26	382.07	381.32
12	382.94	382.23	380.96	381.11	379.93	378.20	382.63	382.33	382.48	382.19	382.08	381.47
13	382.86	382.33	380.85	381.07	379.82	378.19	382.56	382.20	382.44	382.09	382.09	381.42
14	382.76	382.28	380.86	381.06	379.72	378.26	382.45	382.14	382.38	382.12	382.01	381.27
15	382.62	382.18	381.38	381.02	379.61	378.36	382.25	382.13	382.30	382.14	381.99	381.24
16	383.43	382.11	381.68	380.93	379.50	378.66	382.02	382.16	382.26	382.11	381.95	381.37
17	383.80	382.13	381.83	380.84	379.39	378.81	381.83	382.22	382.38	382.15	381.96	381.34
18	383.80	382.15	381.92	380.82	379.27	378.86	381.79	382.30	382.38	382.09	381.95	381.41
19	383.68	382.15	382.05	380.77	379.15	379.01	381.77	382.34	382.39	382.01	381.84	381.51
20	383.54	382.12	382.12	380.72	379.02	379.26	381.84	382.37	382.34	382.02	382.00	381.43
21	383.40	382.05	382.18	380.57	378.89	379.41	381.93	382.46	382.32	382.03	381.92	381.38
22	383.25	382.11	382.26	380.60	378.76	380.06	381.98	382.45	382.38	382.04	381.85	381.47
23	383.14	382.06	382.25	380.51	378.66	380.61	381.95	382.46	382.37	382.04	381.84	381.39
24	383.01	382.02	382.22	380.40	378.63	381.01	381.94	382.52	382.32	382.09	381.85	381.32
25	382.80	381.94	382.21	380.29	378.60	381.26	381.92	382.58	382.26	381.94	381.90	381.39
26	382.61	381.92	382.25	380.23	378.57	381.45	381.91	382.62	382.19	381.87	381.82	381.30
27	382.40	381.88	382.22	380.27	378.54	381.81	381.94	382.60	382.23	381.94	381.79	381.17
28	382.22	381.75	382.16	380.35	378.50	382.36	381.94	382.57	382.30	382.02	381.69	381.30
29	382.08	381.71	382.07	380.44	---	382.51	381.92	382.53	382.29	381.97	381.72	381.21
30	381.97	381.62	381.95	380.49	---	382.53	381.93	382.53	382.31	382.04	381.68	381.02
31	381.97	---	381.83	380.52	---	382.56	---	382.56	---	381.95	381.68	---
MEAN	383.09	381.96	381.76	380.82	379.58	379.51	382.32	382.29	382.39	382.10	381.91	381.41
MAX	383.80	382.33	382.26	381.67	380.52	382.56	383.01	382.62	382.56	382.28	382.10	381.68
MIN	381.97	381.62	380.85	380.23	378.50	378.19	381.77	381.85	382.19	381.87	381.68	381.02

CAL YR 1977 MEAN 381.64 MAX 383.93 MIN 378.77
WTR YR 1978 MEAN 381.61 MAX 383.80 MIN 378.19

04234000 FALL CREEK NEAR ITHACA, NY

LOCATION.--Lat 42°27'12", long 76°28'23", Tompkins County, Hydrologic Unit 04140201, on left bank in Forest Home, 0.2 mi (0.3 km) east of Ithaca, 0.5 mi (0.8 km) upstream from Cornell University dam, and 2.2 mi (3.5 km) upstream from mouth.

DRAINAGE AREA.--126 mi² (326 km²).

PERIOD OF RECORD.--July 1908 to June 1909 (gage heights only), February 1925 to current year.

REVISED RECORDS.--WSP 874: 1935-38. WSP 1912: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 795.13 ft (242.356 m) National Geodetic Vertical Datum of 1929. July 1908 to June 1909, nonrecording gage at bridge 1.2 mi (1.9 km) downstream at different datum.

REMARKS.--Records good except those for winter periods, which are poor. Diversion from point about 1 mi (2 km) upstream from station by Cornell University for water supply and at several sites for irrigation purposes. Records of diversion from Fall Creek are in files of Cornell University.

AVERAGE DISCHARGE.--53 years (1925-78), 187 ft³/s (5.296 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,500 ft³/s (439 m³/s) July 8, 1935 gage height, 9.52 ft (2.902 m), from average of computed flow over each of four dams; maximum gage height 11.16 ft (3.402 m) Feb. 21, 1971 (ice jam); minimum discharge, about 3 ft³/s (0.085 m³/s) Aug. 25, 1927, result of regulation; minimum daily, 3.6 ft³/s (0.10 m³/s) Aug. 17, 1965.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,900 ft³/s (53.8 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 17	1330	*3,960	112	5.05	1.530	Mar. 22	0430	2,030	57.5	3.77	1.149
Dec. 15	0730	2,500	70.8	4.12	1.256	Mar. 27	2230	2,240	63.4	3.93	1.198
Jan. 9	1030	3,190	90.3	4.57	1.393	Apr. 2	0030	2,030	57.5	3.77	1.149
Mar. 15	0300	ice jam		*6.87	2.094	Apr. 5	1030	2,430	68.8	4.07	1.241

Minimum discharge, 5.2 ft³/s (0.15 m³/s) July 7, gage height, 0.17 ft (0.052 m), result of regulation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	438	167	1060	170	300	92	1210	142	62	29	28	28
2	799	161	653	180	260	92	1440	142	72	28	25	22
3	674	156	380	150	260	82	716	135	135	31	33	19
4	716	242	320	150	210	74	571	128	101	61	81	21
5	427	360	250	160	200	70	1950	159	78	53	41	17
6	375	238	260	160	210	66	979	265	75	38	52	15
7	328	238	240	160	190	66	1130	210	69	32	70	15
8	273	495	240	230	190	60	903	167	103	29	52	15
9	571	351	220	2300	190	56	591	265	128	28	50	16
10	709	328	200	650	160	64	466	289	116	28	75	15
11	390	1230	210	430	170	88	466	214	76	29	55	15
12	342	545	190	380	170	110	674	167	61	26	38	16
13	293	416	240	350	160	140	489	156	133	22	62	17
14	253	375	670	310	160	270	438	150	150	21	37	15
15	277	361	2120	270	120	600	370	140	92	36	27	15
16	438	460	1020	240	130	625	337	140	67	30	25	19
17	3110	365	646	220	130	401	288	204	58	24	23	34
18	1800	466	514	210	120	305	257	179	57	22	21	33
19	953	319	551	210	100	289	235	156	53	21	21	204
20	903	265	438	210	100	297	342	130	57	19	23	130
21	545	250	401	200	92	702	577	148	52	19	27	61
22	421	250	390	200	100	1620	375	140	83	24	21	51
23	351	224	320	200	110	1190	277	114	61	24	19	43
24	305	217	280	220	110	1130	238	105	48	19	18	34
25	277	204	571	270	110	564	214	101	42	17	18	29
26	257	224	380	860	110	495	197	92	39	20	19	27
27	238	200	230	1500	100	1390	185	85	39	21	19	24
28	221	200	200	919	92	1450	173	79	39	46	17	23
29	204	190	180	618	---	971	161	75	37	48	19	21
30	191	217	200	438	---	688	150	69	32	36	19	21
31	179	---	210	365	---	674	---	65	---	31	24	---
TOTAL	17258	9734	13784	12930	4354	14721	16399	4611	2215	912	1059	1015
MEAN	557	324	445	417	156	475	547	149	73.8	29.4	34.2	33.8
MAX	3110	1230	2120	2300	300	1620	1950	289	150	61	81	204
MIN	179	156	180	150	92	56	150	65	32	17	17	15
CFSM	4.42	2.57	3.53	3.31	1.24	3.77	4.34	1.18	.59	.23	.27	.27
IN.	5.10	2.87	4.07	3.82	1.29	4.35	4.84	1.36	.65	.27	.31	.30

CAL YR 1977 TOTAL 105395 MEAN 289 MAX 3110 MIN 21 CFSM 2.29 IN 31.12
WTR YR 1978 TOTAL 98992 MEAN 271 MAX 3110 MIN 15 CFSM 2.15 IN 29.23

04234500 CANANDAIGUA LAKE AT CANANDAIGUA, NY

LOCATION.--Lat 42°52'19", long 77°16'22", Ontario County, Hydrologic Unit 04140201, at south end of city pier at northern end of Canandaigua Lake, 1 mi (2 km) southeast of Canandaigua.

DRAINAGE AREA.--184 mi² (477 km²).

PERIOD OF RECORD.--November 1939 to current year. December 1927 to November 1939, records for site on west side of E. T. Waldorf's boathouse collected by, and in files of, city of Canandaigua.

REVISED RECORDS.--WSP 2112: Drainage area. WRD NY 1971: 1970.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. June 26, 1946 to Sept. 30, 1975, at datum 681.17 ft (207.621 m) higher, and prior to June 26, 1946, nonrecording gage at E. T. Waldorf's boathouse at same datum.

REMARKS.--Lake elevation regulated by one gate on West outlet, which is a 1.5 mi-(2.4 km-) long canal, and by two gates on East outlet, which is the natural outlet. Sill elevations of West and East outflow structures are 684.37 ft (208.596 m) and 684.94 ft (208.770 m), respectively. Water diverted for municipal supply for villages of Newark, Palmyra, and Gorham. Records of diversion in files of city of Canandaigua. Area of water surface, 16.6 mi² (43.0 km²).

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 692.11 ft (210.955 m) June 24, 1972; minimum daily, 685.62 ft (208.977 m) Jan. 30, 1942.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 689.61 ft (210.193 m) Apr. 6; minimum, 687.11 ft (209.431 m) Mar. 14.

ELEVATION, IN FEET ABOVE NGVD, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	689.49	688.43	688.24	688.40	688.12	687.39	689.24	688.64	688.46	688.29	687.99	687.58
2	689.50	688.37	688.24	688.36	688.06	687.37	689.36	688.64	688.46	688.28	687.99	687.59
3	689.50	688.30	688.20	688.31	688.06	687.34	689.40	688.64	688.45	688.27	687.99	687.56
4	689.50	688.27	688.17	688.26	688.03	687.34	689.38	688.64	688.45	688.27	687.96	687.54
5	689.48	688.26	688.15	688.19	688.00	687.31	689.51	688.64	688.44	688.27	687.96	687.52
6	689.39	688.24	688.19	688.13	687.98	687.29	689.57	688.60	688.43	688.26	687.94	687.53
7	689.30	688.24	688.12	688.09	688.00	687.25	689.59	688.54	688.45	688.26	687.93	687.47
8	689.31	688.35	688.12	688.14	687.98	687.24	689.58	688.52	688.45	688.26	687.95	687.47
9	689.23	688.40	688.15	688.16	687.96	687.22	689.54	688.56	688.43	688.22	687.94	687.44
10	689.21	688.46	688.01	688.20	687.92	687.19	689.49	688.58	688.43	688.20	687.91	687.45
11	689.18	688.57	687.99	688.21	687.89	687.18	689.44	688.60	688.43	688.15	687.90	687.46
12	689.10	688.56	687.96	688.17	687.86	687.15	689.39	688.57	688.43	688.14	687.89	687.44
13	689.00	688.55	687.93	688.13	687.82	687.14	689.33	688.52	688.43	688.14	687.88	687.44
14	688.93	688.54	688.02	688.10	687.79	687.19	689.26	688.48	688.39	688.10	687.87	687.49
15	688.88	688.54	688.31	688.10	687.76	687.44	689.20	688.47	688.37	688.10	687.85	687.44
16	688.83	688.53	688.50	688.06	687.73	687.65	689.13	688.47	688.36	688.08	687.89	687.43
17	688.98	688.54	687.56	688.02	687.69	687.78	689.07	688.46	688.38	688.06	687.85	687.44
18	689.15	688.60	688.62	688.06	687.67	687.85	689.01	688.47	688.36	688.07	687.81	687.47
19	689.15	688.61	688.72	688.02	687.64	687.90	688.97	688.47	688.37	688.07	687.82	687.60
20	689.11	688.61	688.80	688.01	687.60	687.94	688.90	688.48	688.40	688.06	687.78	687.62
21	689.07	688.60	688.81	688.02	687.57	688.06	688.93	688.47	688.41	688.07	687.77	687.62
22	689.02	688.52	688.82	687.98	687.56	688.45	688.90	688.47	688.43	688.09	687.75	687.59
23	688.94	688.52	688.82	687.95	687.55	688.74	688.86	688.46	688.41	688.09	687.73	687.59
24	688.90	688.45	688.77	687.91	687.53	688.93	688.51	688.44	688.39	688.05	687.72	687.59
25	688.84	688.43	688.75	687.87	687.49	689.00	688.49	688.47	688.39	688.06	687.69	687.57
26	688.78	688.37	688.74	688.00	687.48	689.02	688.50	688.44	688.39	688.06	687.68	687.56
27	688.73	688.31	688.69	688.08	687.45	689.11	688.56	688.45	688.37	688.05	687.67	687.56
28	688.65	688.28	688.64	688.11	687.41	689.15	688.59	688.45	688.36	688.04	687.67	687.53
29	688.59	688.22	688.59	688.14	---	689.19	688.61	688.45	688.34	688.04	687.64	687.47
30	688.53	688.18	688.51	688.14	---	689.18	688.65	688.45	688.31	688.00	687.62	687.50
31	688.48	---	688.45	688.14	---	689.17	---	688.45	---	688.01	687.60	---
MEAN	689.06	688.43	688.37	688.11	687.77	687.94	689.10	688.52	688.41	688.13	687.83	687.52
MAX	689.50	688.61	688.82	688.40	688.12	689.19	689.59	688.64	688.46	688.29	687.99	687.62
MIN	688.48	688.18	687.56	687.87	687.41	687.14	688.49	688.44	688.31	688.00	687.60	687.43

CAL YR 1977 MEAN 688.19 MAX 689.74 MIN 686.96
WTR YR 1978 MEAN 688.27 MAX 689.59 MIN 687.14

04235000 CANANDAIGUA OUTLET AT CHAPIN, NY

LOCATION.--Lat 42°55'05", long 77°13'59", Ontario County, Hydrologic Unit 04140201, on right bank at Chapin, 25 ft (8 m) upstream from bridge on State Highway 488, and 4.1 mi (6.6 km) downstream from Canandaigua Lake.

DRAINAGE AREA.--195 mi^2 (505 km^2).

PERIOD OF RECORD.--November 1939 to current year. Prior to October 1964, published as "Canandaigua Lake Outlet."

REVISED RECORDS.--WSP 2112: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 671.44 ft (204.655 m) National Geodetic Vertical Datum of 1929. Prior to June 25, 1974, at site 0.1 mi (0.2 km) upstream at datum 676.90 ft (206.319 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair. Flow regulated by Canandaigua Lake (see station 04234500), from which water is diverted for municipal supply by villages of Newark, Palmyra, and Gorham. Monthly runoff adjusted for change in contents in Canandaigua Lake from October 1945 to September 1966.

AVERAGE DISCHARGE.--38 years (1940-78), 155 ft^3/s (4.390 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,710 ft^3/s (48.4 m^3/s) June 24, 1972, gage height, 5.62 ft (1.713 m) site and datum then in use; minimum, 4.6 ft^3/s (0.13 m^3/s) Sept. 17, 1948.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 865 ft^3/s (24.5 m^3/s) Oct. 3, gage height, 5.85 ft (1.783 m); minimum daily, 11 ft^3/s (0.31 m^3/s) July 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	774	417	429	457	390	215	673	124	77	29	29	39
2	784	401	379	450	370	210	698	60	74	28	29	38
3	818	386	349	460	370	210	714	57	63	29	30	37
4	750	405	342	459	370	200	719	57	51	28	29	37
5	698	398	331	405	360	200	760	64	50	28	29	34
6	673	379	342	390	350	200	774	71	45	30	25	36
7	644	382	338	370	360	196	784	68	44	31	25	36
8	634	413	335	400	350	191	769	72	45	31	26	40
9	678	401	349	390	360	187	755	106	43	32	27	44
10	644	449	317	390	350	185	745	156	40	32	28	43
11	610	496	300	433	331	180	729	156	38	33	30	43
12	539	457	280	450	304	178	714	182	40	33	32	44
13	564	445	260	380	298	178	693	241	40	36	32	38
14	544	445	417	386	301	261	673	445	36	36	33	37
15	525	445	589	401	295	461	649	469	33	37	36	37
16	529	445	515	394	295	386	629	457	32	33	38	40
17	750	453	500	401	270	364	610	353	31	19	40	42
18	668	482	520	375	270	353	590	180	32	11	40	50
19	644	461	560	356	260	371	574	176	32	12	38	83
20	629	445	559	350	260	405	589	264	31	12	39	43
21	620	449	560	350	190	539	615	457	39	13	38	37
22	610	433	560	349	118	594	564	457	36	36	37	34
23	584	421	559	338	241	663	544	317	32	33	38	42
24	569	417	534	331	239	644	529	77	30	31	38	42
25	549	401	600	328	233	644	515	71	29	31	39	40
26	534	398	559	386	231	663	496	74	29	30	36	42
27	515	375	501	437	228	708	482	86	34	39	38	37
28	496	367	610	430	225	668	461	90	38	36	39	36
29	478	353	644	430	---	668	342	92	33	29	40	34
30	461	349	487	420	---	658	154	90	31	32	40	36
31	449	---	469	410	---	649	---	85	---	28	40	---
TOTAL	19014	12568	14094	12316	8219	12229	18543	5656	1208	898	1060	1221
MEAN	613	419	455	397	294	394	618	182	40.3	29.0	34.2	40.7
MAX	818	496	644	459	390	708	784	469	77	39	40	83
MIN	449	349	260	328	118	178	154	57	29	11	25	34

CAL YR 1977 TOTAL 87275 MEAN 239 MAX 958 MIN 20
WTR YR 1978 TOTAL 107026 MEAN 293 MAX 818 MIN 11

04235150 FLINT CREEK AT POTTER, NY

LOCATION.--Lat 42°42'09", long 77°12'26", Yates County, Hydrologic Unit 04140201, on left bank 90 ft (27 m) upstream from bridge on State Highway 364 at Potter, 0.1 mi (0.2 km) downstream from unnamed tributary, and 0.5 mi (0.8 km) upstream from Nettle Valley Creek.

DRAINAGE AREA.--31.0 mi² (80.3 km²).

PERIOD OF RECORD.--March 1964 to September 1968, October 1970 to September 1978 (discontinued).

REVISED RECORDS.--WRD NY 1974: 1973.

GAGE.--Water-stage recorder. Datum of gage is 883.93 ft (269.422 m) National Geodetic Vertical Datum of 1929. Prior to July 23, 1974, recording gage at present site and datum. July 24, 1974 to July 22, 1975, nonrecording gages at various sites within 370 ft (113 m) at datum 1.38 ft (0.421 m) higher.

REMARKS.--Records fair except those for winter periods, which are poor.

AVERAGE DISCHARGE.--12 years (1964-68, 1970-78), 33.4 ft³/s (0.946 m³/s), 14.63 in/yr (372 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,040 ft³/s (143 m³/s) June 23, 1972, gage height, 10.15 ft (3.094 m), from floodmarks, from rating curve extended above 700 ft³/s (19.8 m³/s); minimum daily, 0.02 ft³/s (0.001 m³/s) Sept. 23-27, 1964; minimum gage height, 1.39 ft (0.424 m) July 29, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 300 ft³/s (8.50 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Nov. 8	2000	394	11.2	5.55	1.692
Dec. 15	2245	392	11.1	5.54	1.689
Mar. 22	1645	424	12.0	5.68	1.731
Apr. 2	0700	648	18.4	6.43	1.960
Apr. 5	1030	*652	18.5	*6.44	1.963

Minimum discharge, 0.9 ft³/s (0.025 m³/s) Sept. 16, gage height, 1.43 ft (0.436 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALJES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	47	19	62	31	84	17	220	27	10	4.0	6.5	2.8
2	77	18	81	30	68	18	499	26	9.5	3.5	5.5	2.9
3	69	17	52	25	58	17	195	24	10	3.5	5.0	2.8
4	69	33	45	27	52	16	137	22	9.9	6.0	7.1	3.1
5	52	58	32	28	54	17	459	28	9.2	6.0	5.7	3.1
6	40	46	29	28	50	16	237	40	8.1	4.5	5.5	2.8
7	34	56	41	26	56	18	187	34	7.4	3.5	5.5	2.1
8	29	258	45	36	50	18	204	30	9.5	2.9	7.1	1.9
9	37	249	40	88	46	16	130	32	11	2.9	6.3	2.3
10	73	139	35	130	41	16	99	34	9.2	3.1	15	2.3
11	53	182	34	96	37	15	91	30	7.1	2.8	13	2.1
12	40	169	32	70	34	15	106	26	6.3	2.4	20	2.4
13	35	108	31	56	32	14	88	31	10	2.0	27	3.1
14	31	86	72	45	30	32	73	32	10	1.9	14	2.9
15	33	76	220	40	28	98	63	34	7.1	2.1	9.5	2.1
16	45	82	270	36	26	150	55	34	6.0	3.3	7.1	2.3
17	143	92	140	33	24	140	50	84	5.7	24	6.8	4.7
18	191	125	100	30	26	110	45	93	5.5	10	6.3	6.0
19	143	107	120	27	24	88	42	55	6.8	6.0	5.2	20
20	102	81	100	28	24	82	56	44	9.5	4.7	6.5	15
21	[illegible]	69	90	27	24	126	89	42	6.8	5.2	6.5	8.8
22	57	62	84	27	23	300	71	39	11	9.5	4.5	6.8
23	48	56	68	28	22	334	56	32	7.8	6.5	4.0	6.8
24	41	51	60	25	24	325	49	28	6.0	4.7	3.7	5.5
25	37	47	58	28	24	187	44	24	5.2	4.0	4.0	4.5
26	33	45	52	41	21	135	40	21	4.7	3.5	4.0	3.7
27	30	41	48	84	20	134	37	18	4.5	4.2	3.5	3.1
28	28	37	40	100	18	133	34	16	8.4	15	3.3	2.8
29	25	35	38	130	---	142	32	15	6.8	11	3.5	2.6
30	23	35	38	130	---	125	30	14	5.0	8.8	2.9	2.3
31	21	---	36	100	---	121	---	11	---	7.4	2.6	---
TOTAL	1757	2479	2193	1630	1020	2975	3518	1020	234.0	178.9	227.1	133.6
MEAN	56.7	82.6	70.7	52.6	36.4	96.0	117	32.9	7.80	5.77	7.33	4.45
MAX	191	258	270	130	84	334	499	93	11	24	27	20
MIN	21	17	29	25	18	14	30	11	4.5	1.9	2.6	1.9
CFSM	1.83	2.67	2.28	1.70	1.17	3.10	3.77	1.06	.25	.19	.24	.14
IN.	2.11	2.97	2.63	1.96	1.22	3.57	4.22	1.22	.28	.21	.27	.16

CAL YR 1977 TOTAL 15317.8 MEAN 42.0 MAX 291 MIN 2.1 CFSM 1.36 IN 18.38
WTR YR 1978 TOTAL 17365.6 MEAN 47.6 MAX 499 MIN 1.9 CFSM 1.54 IN 20.84

04235250 FLINT CREEK AT PHELPS, NY

LOCATION.--Lat 42°57'28", long 77°04'06", Ontario County, Hydrologic Unit 04140201, on right bank 25 ft (8 m) downstream from bridge on Eagle Street at Phelps, and 1.1 mi (1.8 km) upstream from Canandaigua Outlet.

DRAINAGE AREA.--102 mi^2 (264 km^2).

PERIOD OF RECORD.--October 1959 to current year.

REVISED RECORDS.--WSP 2112: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 523.14 ft (159.453 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are poor. Small diversion (during periods of low ground-water level) by Phelps Cement Products, Inc., located about 0.2 mile (0.3 km) upstream. Since 1967, flow from Canandaigua Lake diverted into Flint Creek for municipal supply of village of Gorham; presently not exceeding 0.3 ft^3/s (0.008 m^3/s).

AVERAGE DISCHARGE.--19 years, 93.0 ft^3/s (2.634 m^3/s), 12.38 in/yr (314 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,940 ft^3/s (83.3 m^3/s) Mar. 30, 1960, gage height, 5.83 ft (1.777 m); maximum gage height, 6.20 ft (1.890 m) Mar. 17, 1963 (ice jam); no flow for many days 1962-65, 1969.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 800 ft^3/s (22.7 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 17	1630	1,390	39.4	4.71	1.436	Mar. 23	2130	*1,770	50.1	*5.01	1.527
Nov. 9	0300	1,040	29.5	4.36	1.329	Mar. 27	0100	1,040	29.5	4.36	1.329
Dec. 15	1330	1,340	37.9	4.66	1.420	Apr. 2	0100	828	23.4	4.11	1.253
Mar. 16	1330	957	27.1	4.27	1.302						

Minimum discharge, 1.5 ft^3/s (0.042 m^3/s) Sept. 10, gage height, 1.10 ft (0.335 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	282	62	340	80	280	54	633	61	32	11	12	2.9
2	358	58	305	74	210	54	793	59	32	9.3	9.3	2.7
3	514	56	211	66	170	50	726	56	31	9.0	8.1	2.7
4	400	194	150	70	150	47	506	53	29	10	7.8	2.9
5	244	248	120	78	160	50	672	60	28	12	7.8	2.8
6	166	188	80	68	150	46	738	89	25	11	8.7	3.1
7	126	450	110	66	160	52	628	87	24	9.7	7.6	2.5
8	110	614	127	110	170	52	517	74	24	8.4	7.8	2.2
9	310	828	126	160	130	46	405	86	26	9.0	8.7	2.0
10	395	590	90	210	120	45	273	85	27	7.8	9.3	1.7
11	251	395	86	150	110	43	220	75	23	6.8	13	2.3
12	171	263	80	130	100	43	213	67	20	6.3	16	6.3
13	126	240	74	120	96	42	204	66	22	5.8	18	6.0
14	106	220	450	110	94	94	169	72	25	5.8	25	4.6
15	116	200	900	100	90	600	147	74	24	5.2	19	4.4
16	174	220	1000	90	82	907	131	73	19	5.0	14	6.0
17	1060	270	752	84	86	775	115	141	18	5.4	9.3	6.5
18	821	370	520	80	84	620	103	198	17	23	7.0	11
19	560	382	560	76	82	538	97	146	22	17	6.3	40
20	381	232	450	78	82	581	143	108	26	10	6.5	36
21	255	199	370	76	82	880	276	93	27	7.3	5.4	23
22	185	182	300	78	78	1540	239	85	21	9.3	5.6	15
23	147	162	250	80	74	1620	164	74	23	14	4.8	11
24	122	146	210	72	76	1360	130	65	18	11	4.0	10
25	110	131	200	80	76	924	109	59	15	7.8	4.2	9.3
26	98	140	170	130	68	691	95	53	14	7.0	3.9	8.1
27	88	123	130	190	62	916	85	48	13	15	3.5	7.3
28	82	106	110	250	56	721	78	44	12	10	3.7	6.8
29	76	99	100	420	---	631	71	40	14	20	4.0	5.8
30	69	104	98	440	---	513	65	37	13	20	3.4	5.6
31	65	---	90	360	---	465	---	34	---	14	3.4	---
TOTAL	7968	7472	8559	4176	3176	15000	8745	2366	664	322.9	267.3	250.5
MEAN	257	249	276	135	114	484	292	76.3	22.1	10.4	8.62	8.35
MAX	1060	828	1000	440	280	1620	793	198	32	23	25	40
MIN	65	56	74	66	56	42	65	34	12	5.0	3.4	1.7
CFSM	2.52	2.44	2.71	1.32	1.12	4.75	2.86	.75	.22	.10	.09	.08
IN.	2.91	2.73	3.12	1.52	1.16	5.47	3.19	.86	.24	.12	.10	.09

CAL YR 1977 TOTAL 52118.3 MEAN 143 MAX 1200 MIN 3.4 CFSM 1.40 IN 19.01
WTR YR 1978 TOTAL 58968.7 MEAN 162 MAX 1620 MIN 1.7 CFSM 1.59 IN 21.51

04235396 OWASCO LAKE NEAR AUBURN, NY

LOCATION.--Lat 42°53'56", long 76°32'17", Cayuga County, Hydrologic Unit 04140201, on west side of breakwater at city of Auburn water intake and pumping station, 1 mi (2 km) south of city limits of Auburn, and 1.8 mi (2.9 km) upstream from State dam.

DRAINAGE AREA.--205 mi² (531 km²).

PERIOD OF RECORD.--October 1967 to current year. Records since 1912 collected by, and in files of, city of Auburn.

GAGE.--Nonrecording gage read once daily by employees of city of Auburn Water Division. Datum of gage is National Geodetic Vertical Datum of 1929. Reference mark at elevation 715.48 ft (218.078 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Lake elevation regulated by gates on outlet at State dam. Area of water surface, 10.6 mi² (27.5 km²).

COOPERATION.--Records furnished by city of Auburn.

EXTREMES FOR PERIOD OF RECORD.--Maximum observed elevation, 716.88 ft (218.505 m) June 25, 1972; minimum observed, 708.58 ft (215.975 m) Feb. 17, 18, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum observed elevation since 1912, 716.91 ft (218.514 m) Mar. 23, 1936, Apr. 9, 1940.

EXTREMES FOR CURRENT YEAR.--Maximum observed elevation, 713.98 ft (217.621 m) Oct. 18; minimum observed, 710.71 ft (216.624 m) Mar. 24.

ELEVATION, IN FEET ABOVE NGVD, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
INSTANTANEOUS OBSERVATIONS AT 0700

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	713.08	712.13	711.77	711.67	712.00	712.01	712.61	712.16	712.61	712.62	712.42	712.26
2	713.15	711.95	711.99	711.56	711.92	712.04	712.96	712.19	712.66	712.61	712.43	712.27
3	713.15	711.84	712.02	711.45	711.84	712.05	713.01	712.19	712.73	712.60	712.43	712.27
4	713.28	711.76	711.98	711.33	711.75	712.05	712.86	712.21	712.74	712.59	712.51	712.23
5	713.22	711.73	711.91	711.20	711.68	712.05	712.96	712.14	712.79	712.60	712.48	712.19
6	713.08	711.69	711.92	711.10	711.58	712.05	713.20	712.14	712.75	712.60	712.45	712.21
7	712.91	711.60	711.86	711.00	711.73	712.05	713.15	712.07	712.74	712.62	712.41	712.18
8	712.78	711.73	711.78	711.02	711.68	711.95	713.11	712.01	712.74	712.63	712.38	712.15
9	712.63	711.80	711.72	711.23	711.78	711.80	712.98	711.98	712.71	712.65	712.33	712.11
10	712.82	711.78	711.61	711.41	711.70	711.64	712.78	711.90	712.63	712.65	712.38	712.13
11	712.80	712.08	711.55	711.63	711.62	711.49	712.60	712.01	712.65	712.63	712.34	712.12
12	712.68	712.25	711.50	711.65	711.55	711.36	712.51	712.06	712.62	712.63	712.38	712.15
13	712.54	712.27	711.43	711.61	711.49	711.23	712.38	712.13	712.66	712.71	712.38	712.11
14	712.52	712.26	711.53	711.56	711.53	711.16	712.20	712.16	712.64	712.68	712.42	712.11
15	712.35	712.25	712.43	711.50	711.61	711.23	712.05	712.18	712.64	712.67	712.42	712.13
16	712.28	712.27	712.98	711.42	711.68	711.25	711.87	712.21	712.62	712.68	712.42	712.10
17	712.70	712.29	713.02	711.34	711.75	711.18	711.71	712.29	712.67	712.67	712.43	712.11
18	713.98	712.39	713.03	711.33	711.80	711.08	711.57	712.34	712.66	712.66	712.40	712.12
19	713.68	712.39	713.02	711.26	711.80	710.98	711.45	712.38	712.64	712.68	712.40	712.27
20	713.63	712.32	712.97	711.18	711.84	710.89	711.45	712.41	712.65	712.63	712.38	712.35
21	713.59	712.23	712.88	711.12	711.86	710.83	711.63	712.43	712.67	712.64	712.38	712.38
22	713.62	712.16	712.81	711.06	711.91	711.38	711.75	712.48	712.70	712.63	712.36	712.36
23	713.54	712.08	712.73	710.96	711.95	711.53	711.82	712.54	712.68	712.62	712.36	712.37
24	713.33	712.01	712.58	710.86	711.97	710.71	711.86	712.53	712.66	712.56	712.34	712.38
25	713.12	711.93	712.46	710.92	712.00	710.80	711.95	712.54	712.63	712.55	712.32	712.36
26	712.98	711.88	712.43	711.20	712.00	711.77	712.00	712.54	712.61	712.55	712.33	712.35
27	712.82	711.82	712.33	711.53	712.01	711.95	712.04	712.57	712.60	712.54	712.33	712.36
28	712.68	711.82	712.18	711.83	712.01	712.39	712.08	712.59	712.64	712.56	712.33	712.30
29	712.52	711.69	712.05	712.01	---	712.70	712.12	712.59	712.66	712.52	712.29	712.30
30	712.38	711.62	711.93	712.03	---	712.68	712.15	712.61	712.64	712.48	712.27	712.32
31	712.23	---	711.76	712.02	---	712.60	---	712.61	---	712.43	712.26	---
MEAN	712.97	712.00	712.20	711.39	711.79	711.64	712.29	712.30	712.67	712.61	712.38	712.24
MAX	713.99	712.39	713.03	712.03	712.[illegible]	712.70	713.20	712.61	712.79	712.71	712.51	712.38
MIN	712.23	711.60	711.43	710.86	711.49	710.71	711.45	711.90	712.60	712.43	712.27	712.10

CAL YR 1977 MEAN 712.10 MAX 713.98 MIN 708.58
WTR YR 1978 MEAN 712.21 MAX 713.98 MIN 710.71

04235500 OWASCO OUTLET NEAR AUBURN, NY

LOCATION.--Lat 42°56'48", long 76°35'56", Cayuga County, Hydrologic Unit 04140201, on left bank 2.5 mi (4.0 km) downstream from center of Auburn, and 4 mi (6 km) downstream from State dam at outlet of Owasco Lake.

DRAINAGE AREA.--206 mi² (534 km²).

PERIOD OF RECORD.--November 1912 to current year. Prior to October 1966, published as "Owasco Lake Outlet."

REVISED RECORDS.--WSP 824: 1913-14, 1916, 1920(M), 1922(M), 1928(M), 1929, 1932(M). WSP 2112: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 533.92 ft (162.739 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Diurnal fluctuation caused by mills in Auburn; seasonal regulation at State dam. Diversion from Owasco Lake (see station 04235396) by city of Auburn for municipal water supply; sewage returns to outlet upstream from station.

AVERAGE DISCHARGE.--65 years (1913-78), 290 ft³/s (8.213 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,250 ft³/s (92.0 m³/s) June 23, 1972, gage height, 6.28 ft (1.914 m); minimum, about 2 ft³/s (0.057 m³/s) Dec. 5, 1936; minimum gage height, 1.19 ft (0.363 m) June 26, 1973; minimum daily discharge, 5 ft³/s (0.14 m³/s) Nov. 11, 1934.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,470 ft³/s (41.6 m³/s) Oct. 19, Apr. 6, gage height, 3.73 ft (1.137 m); minimum, 17 ft³/s (0.48 m³/s) Feb. 7, 15, 16, gage height, 1.26 ft (0.384 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1060	665	629	655	665	110	1280	94	36	49	23	22
2	1070	620	655	586	683	120	1390	122	40	48	51	22
3	1100	586	655	611	655	120	1390	170	36	51	86	22
4	1110	577	638	594	629	128	1350	282	34	48	102	22
5	1080	553	629	569	611	128	1400	454	94	38	149	22
6	1040	529	620	561	266	141	1460	498	148	23	148	22
7	994	368	594	553	266	266	1440	483	152	23	200	22
8	961	393	577	561	252	569	1400	483	193	23	266	22
9	953	586	569	629	326	646	1350	646	282	22	290	21
10	978	611	529	655	521	620	1280	266	261	23	269	21
11	970	702	521	545	498	594	1230	70	141	23	119	25
12	935	721	513	655	483	569	1220	66	89	22	25	27
13	885	721	498	655	174	569	1150	64	193	22	23	22
14	521	721	683	646	22	603	1110	64	155	35	24	21
15	817	721	935	629	22	711	1070	64	94	42	25	23
16	817	740	1040	620	22	893	1020	66	64	41	24	54
17	1110	780	1050	603	32	885	935	66	44	41	24	70
18	1360	692	1030	603	56	868	885	64	43	40	29	61
19	1430	770	1020	586	56	950	498	62	97	39	50	45
20	1380	760	1010	546	58	842	406	62	119	61	48	29
21	1310	740	1000	577	58	893	413	64	89	52	34	28
22	1220	702	994	569	58	970	326	62	166	49	24	27
23	1150	683	961	569	77	1040	261	62	116	74	24	26
24	1090	638	918	413	41	1100	162	62	107	54	24	25
25	1030	620	902	33	82	1110	99	62	107	43	24	26
26	978	603	876	349	100	1130	99	53	62	39	23	26
27	918	577	842	561	100	1170	97	44	55	136	23	25
28	859	569	800	620	100	1230	94	43	53	149	23	25
29	808	545	750	655	---	1290	91	44	51	145	23	51
30	750	393	711	655	---	1270	91	44	49	142	23	120
31	711	---	692	638	---	1250	---	38	---	74	23	---
TOTAL	31395	18886	23841	17741	6913	22685	24997	4726	3170	1671	2245	974
MEAN	1013	630	769	572	247	732	833	152	106	53.9	72.4	32.5
MAX	1430	780	1050	655	683	1290	1460	646	282	149	290	120
MIN	521	368	498	33	22	110	91	38	34	22	23	21

CAL YR 1977 TOTAL 161217 MEAN 442 MAX 1470 MIN 18
WTR YR 1978 TOTAL 159244 MEAN 436 MAX 1460 MIN 21

04236000 SKANEATELES LAKE AT SKANEATELES, NY

LOCATION.--Lat 42°56'42", long 76°25'46", Onondaga County, Hydrologic Unit 04140201, on east side of breakwater, enclosed in city of Syracuse boathouse, at Skaneateles.

DRAINAGE AREA.--72.7 mi² (188 km²).

PERIOD OF RECORD.--October 1967 to current year. Records since September 1890 collected by, and in files of, city of Syracuse.

GAGE.--Nonrecording gages read once daily by employees of Syracuse Water Division. Datum of gage is National Geodetic Vertical Datum of 1929. October 1967 to September 1975, at same site at datum 801.75 ft (244.373 m) higher.

REMARKS.--Lake elevation regulated by gates at outlet by Syracuse Water Division. Area of water surface, 13.6 mi² (35.2 km²).

COOPERATION.--Records furnished by city of Syracuse.

EXTREMES FOR PERIOD OF RECORD.--(since 1890): Maximum observed elevation, 866.95 ft (264.246 m) June 25, 26, 1972; minimum observed, 858.90 ft (261.793 m) Nov. 15, 1965.

EXTREMES FOR CURRENT YEAR.--Maximum observed elevation, 864.77 ft (263.582 m) Oct. 22; minimum observed, 861.74 ft (262.658 m) Mar. 14.

ELEVATION, IN FEET ABOVE NGVD, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
INSTANTANEOUS OBSERVATIONS AT 0800

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	863.45	864.34	864.14	864.16	863.84	862.47	863.31	864.23	864.15	863.86	863.23	862.64
2	863.57	864.29	864.19	864.11	863.77	862.44	863.46	864.17	864.13	863.84	863.17	862.61
3	863.58	864.25	864.17	864.06	863.73	862.38	863.57	864.17	864.12	863.80	863.14	862.58
4	863.85	864.24	864.17	864.02	863.68	862.32	863.65	864.14	864.12	863.81	863.25	862.56
5	863.83	864.19	864.12	863.95	863.61	862.24	863.77	864.12	864.13	863.82	863.23	862.53
6	863.83	864.18	864.17	863.98	863.56	862.24	863.88	864.23	864.17	863.81	863.20	862.53
7	863.85	864.13	864.17	863.84	863.51	862.17	863.99	864.17	864.16	863.73	863.15	862.42
8	863.91	864.25	864.14	863.80	863.49	862.09	864.07	864.16	864.15	863.73	863.24	862.40
9	863.99	864.21	864.12	863.98	863.46	862.07	864.15	864.25	864.10	863.67	863.22	862.36
10	864.07	864.20	864.09	864.07	863.43	862.01	864.15	864.28	864.08	863.67	863.26	862.32
11	864.10	864.32	864.03	864.05	863.39	861.90	864.25	864.24	864.06	863.65	863.23	862.28
12	864.10	864.35	863.97	864.00	863.36	861.85	864.32	864.24	864.07	863.62	863.24	862.30
13	864.07	864.35	864.00	863.95	863.29	861.82	864.34	864.23	864.13	863.60	863.21	862.34
14	864.03	864.31	864.07	863.91	863.26	861.74	864.36	864.23	864.09	863.57	863.20	862.35
15	864.03	864.34	864.50	863.89	863.20	861.86	864.33	864.21	864.06	863.54	863.18	862.34
16	864.02	864.36	864.58	863.88	863.13	861.96	864.29	864.26	864.05	863.51	863.17	862.25
17	864.20	864.40	864.55	863.96	863.06	861.95	864.27	864.31	864.05	863.46	863.15	862.14
18	864.66	864.36	864.53	863.96	863.01	861.94	864.20	864.28	864.05	863.44	863.12	862.20
19	864.76	864.34	864.54	863.93	862.94	861.95	864.20	864.26	864.00	863.41	863.09	862.29
20	864.74	864.30	864.58	863.87	862.92	861.91	864.22	864.24	864.00	863.36	863.06	862.35
21	864.73	864.35	864.55	863.93	862.89	861.95	864.33	864.22	863.98	863.35	863.00	862.33
22	864.77	864.29	864.56	863.91	862.83	862.15	864.38	864.25	863.97	863.36	862.97	862.31
23	864.68	864.28	864.54	863.84	862.79	862.32	864.34	864.24	863.97	863.33	862.95	862.23
24	864.68	864.20	864.51	863.81	862.74	862.45	864.27	864.24	863.95	863.27	862.93	862.21
25	864.70	864.18	864.46	863.81	862.68	862.52	864.25	864.25	863.94	863.25	862.89	862.15
26	864.71	864.17	864.46	863.85	862.63	862.55	864.25	864.20	863.95	863.23	862.86	862.13
27	864.57	864.15	864.44	863.96	862.57	862.70	864.26	864.19	863.91	863.20	862.82	862.13
28	864.45	864.16	864.40	863.94	862.52	862.98	864.26	864.15	863.97	863.25	862.80	862.05
29	864.45	864.13	864.37	863.89	---	863.08	864.24	864.16	863.94	863.26	862.76	862.01
30	864.40	864.11	864.27	863.86	---	863.13	864.23	864.17	863.89	863.26	862.74	861.97
31	864.36	---	864.20	863.86	---	863.18	---	864.17	---	863.20	862.69	---
MEAN	864.23	864.26	864.31	863.93	863.19	862.27	864.12	864.21	864.05	863.51	863.07	862.31
MAX	864.77	864.40	864.58	864.16	863.84	863.18	864.38	864.31	864.17	863.86	863.26	862.64
MIN	863.45	864.11	863.97	863.80	862.52	861.74	863.31	864.12	863.89	863.20	862.69	861.97

CAL YR 1977 MEAN 863.70 MAX 864.77 MIN 861.99
WTR YR 1978 MEAN 863.62 MAX 864.77 MIN 861.74

04237500 SENECA RIVER AT BALDWINSVILLE, NY

LOCATION.--Lat 43°09'26", long 76°19'56", Onondaga County, Hydrologic Unit 04140201, on left bank 200 ft (61 m) downstream from bridge on State Highway 31 in Baldwinsville, and 400 ft (122 m) downstream from navigation dam at Lock 24 of New York State Erie (Barge) Canal.

DRAINAGE AREA.--3,138 mi² (8,127 km²), revised.

PERIOD OF RECORD.--November 1949 to current year in reports of Geological Survey. November 1898 to December 1908, prior to construction of Erie (Barge) Canal, not equivalent to later records at same site because of extensive development of Erie (Barge) Canal system. January 1909 to September 1925 (gage heights only) in reports of State Engineer and Surveyor.

REVISED RECORDS.--WSP 2112: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 362.60 ft (110.520 m) Barge Canal datum. Prior to Dec. 31, 1908, nonrecording gage at same site at different datum. Auxiliary water-stage recorder 1,500 ft (457 m) downstream from base gage at same datum.

REMARKS.--Records good except those prior to Apr. 19, which are poor. Discharge from 1898 to 1908 determined on basis of head on dam, flow through 10 mills nearby, lockages at Oswego Canal lock, estimated leakage of dam, wheel gates, flumes, and penstocks; not adjusted for inflow from Lake Erie through Erie (Barge) Canal. Discharge since November 1949, computed by using fall as determined by auxiliary water-stage recorder, represents total discharge at Baldwinsville and includes flow in Erie (Barge) Canal.

A large amount of natural storage and some artificial regulation is afforded by many large lakes and the Erie (Barge) Canal system in river basin. Large diurnal fluctuations at low and medium flows caused by power-plants upstream from station. Seneca River basin receives water from Erie (Barge) Canal through lock 32 near Pittsford. During part of year, entire flow from 45.5 mi² (118 km²) of Mud Creek drainage area may be diverted from Chemung River basin into Keuka Lake in Oswego River basin (see station 01529000).

COOPERATION.--Records of lockages at lock 24 furnished by New York State Department of Transportation (since November 1949).

AVERAGE DISCHARGE.--28 years (1950-78), 3,490 ft³/s (98.84 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 17,200 ft³/s (487 m³/s) Apr. 4, 1960, June 28, 1972; maximum gage height, 9.21 ft (2.807 m) Apr. 4, 1960, June 30, 1972; minimum daily discharge, 237 ft³/s (6.71 m³/s) Nov. 10, 1957; minimum gage height, 0.81 ft (0.247 m) Aug. 10, 1952, Oct. 2, 1969.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 14,200 ft³/s (402 m³/s) Mar. 31; maximum recorded gage height, 8.64 ft (2.633 m) Jan. 18; minimum daily discharge, 412 ft³/s (11.7 m³/s) July 11; minimum gage height, 1.00 ft (0.305 m) Sept. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10800	9130	8760	9520	9400	5000	14100	2650	1720	1150	944	644
2	10900	8930	9650	9340	9200	4500	13200	1510	1670	1130	863	684
3	11200	8680	9800	8840	9200	4100	13400	1280	1620	1080	897	719
4	11700	8620	9830	8810	9000	3900	13800	1930	1580	1080	948	755
5	11800	8670	9430	8620	8600	3800	14000	1880	1100	1100	948	765
6	11800	8660	9140	8500	8200	3600	13800	2050	1180	1100	993	793
7	11500	8660	8820	8330	7800	3100	13300	2070	1730	1010	1000	1090
8	11200	9290	8700	8240	7600	2900	12800	2170	1720	970	1080	1370
9	11200	9730	8970	7440	7400	3300	12800	3870	1470	956	1100	540
10	11200	9980	8930	8790	7400	3900	12600	4850	2060	568	1170	549
11	11400	10700	8640	10000	7400	4150	12200	5100	2080	412	1430	608
12	11400	10800	8530	9800	7400	4540	11900	5070	2060	578	1520	1120
13	11200	10900	8550	9400	7400	4700	11600	4610	2060	682	1450	1340
14	10700	11000	9140	9200	7400	4830	11200	5160	2200	692	1420	611
15	10300	10800	10800	9000	7400	5420	10900	4310	2050	734	1430	732
16	10000	10700	11600	9000	7200	6100	10500	4100	1730	765	1990	826
17	10800	10600	12000	8800	7000	6870	9780	4130	1030	758	2610	868
18	11300	10800	12300	8400	7000	7500	9250	4070	1080	781	2730	948
19	11800	10800	12300	8200	6800	7940	8180	3940	1080	791	2660	2890
20	12200	10600	12400	8000	6600	8170	7240	3550	1090	788	2630	4140
21	12200	10100	12200	8000	6400	8380	6960	3390	1180	790	2370	3970
22	11900	9760	12100	8000	6400	10800	6910	3210	1300	814	2210	2570
23	11500	9310	11800	8400	6000	11500	6930	2910	1490	838	1420	567
24	11100	9030	11500	8400	5400	11600	6740	2280	2080	831	1320	561
25	10800	8640	11100	8400	4900	11400	6360	1990	2010	803	827	700
26	10500	8390	11300	8600	5200	11500	5880	1880	1920	769	709	835
27	10400	8260	11100	9000	5400	11700	4730	1870	1710	898	1480	1410
28	10100	7860	10700	9400	5200	11800	3970	1520	1750	1430	1570	1320
29	9840	7430	10400	9600	---	12700	3350	1840	1240	1370	1780	1210
30	9590	7890	9970	9600	---	13500	3220	1820	1190	1360	1270	620
31	9370	---	9720	9400	---	14200	---	1730	---	1350	591	---
TOTAL	341700	284720	320180	273030	200300	227400	291600	92740	48180	28378	45360	35755
MEAN	11020	9491	10330	8807	7154	7335	9720	2992	1606	915	1463	1192
MAX	12200	11000	12400	10000	9400	14200	14100	5160	2200	1430	2730	4140
MIN	9370	7430	8530	7440	4900	2900	3220	1280	1030	412	591	540

CAL YR 1977 TOTAL 1689761 MEAN 4629 MAX 12400 MIN 653
WTR YR 1978 TOTAL 2189343 MEAN 5998 MAX 14200 MIN 412

04238500 ONONDAGA RESERVOIR NEAR NEDROW, NY

LOCATION.--Lat 42°55'51", long 76°10'24", Onondaga County, Hydrologic Unit 04140201, at Onondaga Dam on Onondaga Creek, 3.5 mi (5.6 km) southwest of Nedrow, 4 mi (6 km) south of Syracuse, and 12.6 mi (20.3 km) upstream from Onondaga Lake.

DRAINAGE AREA.--67.7 mi^2 (175 km^2).

PERIOD OF RECORD.--June 1949 to September 1952 (monthly elevations and contents), October 1952 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Reservoir is formed by a rolled earthfill dam, completed by Corps of Engineers in August 1949 for flood control; first used for flood regulation about a year prior to completion. Usable capacity, 18,200 acre-ft (22.5 hm^3) between elevations 457.0 ft (139.29 m), conduit invert at intake, and 504.5 ft (153.77 m), crest of spillway. No dead storage. The flood-control works consist of a pressure conduit and a side-channel spillway and are not provided with gates. Water is stored during high flows and released gradually. Storage includes minor diversion from Gate House Pond in headwaters of West Branch Tioughnioga River basin.

COOPERATION.--Capacity curve furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 485.9 ft (148.10 m) Apr. 1, 1960, contents, 5,960 acre-ft (7.35 hm^3); no contents at times.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 477.40 ft (145.512 m) Oct. 18, contents, 2,690 acre-ft (3.32 hm^3); minimum elevation, 459.52 ft (140.062 m) Sept. 11; no contents many days.

Capacity table (elevation, in feet, and contents, in acre-feet)

460.00	0	470.00	700
461.00	5	473.00	1,420
462.00	15	478.00	2,880
464.00	50	482.00	4,230
467.00	225	486.00	6,010

ELEVATION, IN FEET ABOVE NGVD, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	462.09	460.63	465.07	461.17	462.12	460.56	467.87	460.81	460.11	459.84	459.87	459.61
2	463.89	460.61	465.47	461.12	462.81	460.56	471.80	460.79	460.24	459.81	459.82	459.60
3	463.75	460.58	462.87	461.06	461.71	460.81	469.99	460.73	460.71	459.78	460.09	459.59
4	464.25	460.82	462.17	460.97	462.09	460.57	466.74	460.67	460.36	459.80	460.41	459.59
5	462.30	460.91	461.60	460.94	462.21	460.51	468.71	460.83	460.23	459.81	460.16	459.59
6	461.50	460.72	461.78	460.91	461.49	460.55	468.28	461.16	460.17	459.79	459.94	459.58
7	461.11	460.94	461.60	460.87	461.35	460.85	467.09	461.03	460.10	459.77	459.87	459.57
8	460.87	462.60	461.45	461.69	461.26	460.87	466.77	460.85	460.16	459.78	460.08	459.55
9	462.49	462.25	461.36	470.19	461.11	460.76	464.53	461.31	460.17	459.78	459.98	459.54
10	463.98	461.76	461.32	470.52	461.07	460.72	463.53	461.57	460.13	459.78	460.14	459.53
11	462.20	467.22	461.35	465.80	461.03	460.53	463.65	461.04	460.04	459.76	460.09	460.12
12	461.38	465.15	461.67	462.80	460.98	460.51	464.96	460.80	459.97	459.75	459.94	461.15
13	461.03	462.61	461.42	462.36	460.97	460.72	463.88	460.71	460.28	459.74	459.89	460.42
14	460.86	462.01	465.34	461.97	460.94	462.27	463.16	460.63	460.32	459.76	459.81	460.14
15	460.98	461.80	474.11	461.85	461.34	466.07	462.68	460.61	460.12	459.78	459.76	459.98
16	461.63	462.03	474.16	461.59	461.54	464.53	462.39	460.59	460.01	459.84	459.72	459.95
17	470.01	462.13	471.54	461.39	460.83	462.87	462.10	460.99	459.95	459.98	459.69	460.08
18	477.03	462.96	467.96	461.32	460.75	462.09	461.88	460.82	459.92	459.80	459.67	460.09
19	474.45	462.34	464.61	461.34	460.93	461.99	461.73	460.71	459.96	459.74	459.66	462.14
20	470.73	461.94	463.29	461.10	461.10	462.06	462.16	460.58	460.03	459.72	459.68	460.96
21	465.50	461.86	463.18	461.26	460.92	464.03	462.68	460.69	460.05	459.73	459.69	460.39
22	462.31	462.17	463.05	461.24	460.89	471.25	462.28	460.63	460.48	459.76	459.67	460.17
23	461.85	461.75	462.54	461.13	460.65	472.34	461.72	460.49	460.08	459.74	459.64	460.01
24	461.52	461.54	462.27	461.07	460.85	472.65	461.43	460.36	459.95	459.71	459.63	459.91
25	461.35	461.33	463.66	461.26	460.62	470.43	461.27	460.30	459.89	459.67	459.63	459.86
26	461.23	461.90	463.31	464.35	460.59	467.06	461.15	460.26	459.86	459.67	459.63	459.82
27	461.13	461.78	462.33	467.50	460.57	469.25	461.06	460.22	459.87	460.10	459.62	459.78
28	460.95	461.58	461.83	465.92	460.57	472.30	460.97	460.19	460.07	460.70	459.61	459.76
29	460.81	461.44	461.67	463.96	---	471.60	460.90	460.16	459.95	459.96	459.61	459.74
30	460.73	461.47	461.42	463.11	---	469.66	460.85	460.13	459.88	460.18	459.60	459.72
31	460.67	---	461.36	462.40	---	467.12	---	460.11	---	459.92	459.60	---
MEAN	463.37	461.96	463.77	462.71	461.19	464.45	463.94	460.67	460.10	459.84	459.81	460.00
MAX	477.03	467.22	474.16	470.52	462.81	472.65	471.80	461.57	460.71	460.70	460.41	462.14
MIN	460.67	460.58	461.32	460.87	460.57	460.51	460.85	460.11	459.86	459.67	459.60	459.53
†	3.2	12.6	6.4	13.8	2.8	161	4.0	0.6	0	0	0	0
‡	-0.01	+.16	-.10	+.12	-.20	+2.57	-2.64	-.06	-.01	0	0	0

CAL YR 1977 MEAN 461.62 MAX 477.03 MIN 459.51 ‡ +.01
WTR YR 1978 MEAN 461.83 MAX 477.03 MIN 459.53 ‡ 0

† Contents, in acre-feet, at end of period.
‡ Change in contents, equivalent in cubic feet per second.

04239000 ONONDAGA CREEK AT DORWIN AVENUE, SYRACUSE, NY

LOCATION.--Lat 42°59'00", long 76°09'04", Onondaga County, Hydrologic Unit 04140201, on left bank 550 ft (168 m) upstream from bridge on Dorwin Avenue, at Syracuse, and 4 mi (6 km) downstream from Onondaga Reservoir.

DRAINAGE AREA.--88.5 mi² (229 km²).

PERIOD OF RECORD.--May 1951 to current year.

REVISED RECORDS.--WSP 2112: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 413.59 ft (126.062 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Records fair. High flows regulated by Onondaga Reservoir (see station 04238500). Discharge includes minor diversion from Gate House Pond in headwaters of West Branch Tioughnioga River basin. The adjusted and unadjusted yearly means are the same for each year of record.

AVERAGE DISCHARGE.--27 years, 127 ft³/s (3.597 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,260 ft³/s (92.3 m³/s) July 3, 1974, gage height, 6.48 ft (1.975 m); minimum daily, 5.5 ft³/s (0.16 m³/s) Aug. 17, 1965; minimum gage height, 1.15 ft (0.351 m) Sept. 16, 1959.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,980 ft³/s (56.1 m³/s) Oct. 17, gage height, 5.28 ft (1.609 m); minimum, 21 ft³/s (0.59 m³/s) Sept. 11, gage height, 1.44 ft (0.439 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	211	104	535	150	200	84	841	109	60	41	37	29
2	367	101	535	150	180	88	923	109	69	39	33	27
3	354	99	311	140	170	96	810	104	117	38	55	25
4	388	125	242	137	160	90	643	98	77	43	73	28
5	238	137	198	137	150	88	774	107	69	39	48	24
6	171	119	206	133	150	90	721	139	63	36	39	24
7	142	133	193	129	140	110	664	129	59	35	38	22
8	123	267	130	188	140	100	605	111	69	36	55	22
9	247	242	120	840	130	94	437	144	67	36	45	24
10	371	219	110	620	130	92	340	164	64	35	66	23
11	221	738	100	500	130	92	347	125	56	35	48	70
12	160	555	100	280	131	92	446	107	50	33	46	179
13	134	293	120	230	129	110	363	104	86	32	41	77
14	121	234	715	200	127	228	297	98	73	32	34	45
15	131	211	1240	190	140	575	257	96	60	34	32	37
16	192	225	1070	170	120	451	234	95	50	40	31	56
17	1330	231	930	160	110	290	209	123	48	53	30	58
18	1190	311	738	150	100	220	195	107	50	34	30	55
19	1050	251	478	150	94	209	188	100	54	31	31	261
20	885	220	340	140	90	217	217	93	55	30	39	131
21	590	217	325	140	88	483	246	104	55	30	31	73
22	251	236	314	140	88	1000	217	93	88	34	29	52
23	201	203	267	130	88	1090	174	85	53	32	28	46
24	175	188	245	130	86	976	155	80	49	29	28	43
25	161	171	374	130	84	835	144	77	46	28	30	39
26	150	214	300	250	84	721	135	73	42	28	31	37
27	141	203	200	786	82	1000	127	72	46	48	26	35
28	131	190	180	626	82	1000	123	67	61	109	26	34
29	123	180	170	320	---	936	117	64	47	46	27	34
30	117	183	160	250	---	822	113	60	44	56	26	32
31	110	---	160	220	---	676	---	59	---	40	29	---
TOTAL	10176	6800	11106	7916	3403	12955	11062	3096	1827	1212	1164	1642
MEAN	328	227	358	255	122	418	369	99.9	60.9	39.1	37.5	54.7
MAX	1330	738	1240	840	200	1090	923	164	117	109	73	261
MIN	110	99	100	129	82	84	113	59	42	28	26	22

CAL YR 1977 TOTAL 66808 MEAN 183 MAX 1330 MIN 26
WTR YR 1978 TOTAL 72359 MEAN 198 MAX 1330 MIN 22

04240010 ONONDAGA CREEK AT SPENCER STREET, SYRACUSE, NY

LOCATION.--Lat 43°03'27", long 76°09'46", Onondaga County, Hydrologic Unit 04140201, on right bank 250 ft (76 m) upstream from bridge on Spencer Street in Syracuse, 1,000 ft (305 m) upstream from Erie (Barge) Canal terminal, and 1.0 mi (1.6 km) upstream from mouth.

DRAINAGE AREA.--109 mi² (282 km²).

PERIOD OF RECORD.--Occasional discharge measurements, water years 1958-70. September 1970 to current year.

REVISED RECORDS.--WRD NY 1972: 1971(M). WRD NY 1975: 1972(M), 1974(M).

GAGE.--Water-stage recorder. Datum of gage is 362.29 ft (110.426 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair. High flows regulated by Onondaga Reservoir (see station 04238500). Discharge includes minor diversion from Gate House Pond in headwaters of West Branch Tioughnioga River basin. Flow may be affected by backwater from Onondaga Lake at times when the lake elevation exceeds 364.75 ft (111.176 m).

AVERAGE DISCHARGE.--8 years, 224 ft³/s (6.344 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,740 ft³/s (77.6 m³/s) July 3, 1974, gage height, 8.73 ft (2.661 m); minimum, 31 ft³/s (0.88 m³/s) Sept. 11, 1978, gage height, 2.31 ft (0.704 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,060 ft³/s (58.3 m³/s) Oct. 17, gage height, 7.62 ft (2.323 m); minimum 31 ft³/s (0.88 m³/s) Sept. 11, gage height, 2.31 ft (0.704 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	349	182	580	218	325	120	904	178	88	79	70	58
2	454	175	410	213	302	110	916	180	155	70	70	52
3	486	171	290	199	296	130	795	180	157	75	208	46
4	464	250	250	199	248	126	696	164	116	77	130	52
5	313	208	250	194	240	110	811	182	114	85	92	52
6	265	182	240	182	248	159	737	199	102	90	81	52
7	238	282	250	178	248	145	734	199	98	84	130	50
8	230	418	250	263	248	139	677	180	110	83	102	46
9	439	358	240	1070	226	139	532	279	110	69	102	40
10	503	391	208	792	228	150	454	240	110	80	120	37
11	352	799	216	662	221	145	473	194	140	72	100	224
12	290	605	235	421	206	148	526	173	100	69	88	263
13	263	376	276	358	211	185	480	166	152	68	77	126
14	243	319	932	316	201	367	439	157	112	71	81	78
15	245	288	1340	290	194	651	394	155	100	67	72	64
16	382	296	1100	279	189	522	361	164	96	78	68	133
17	1590	319	883	258	196	391	343	182	83	98	79	91
18	1170	385	703	245	223	322	343	161	90	71	67	185
19	979	340	493	253	159	313	325	155	100	62	72	438
20	815	302	379	238	143	331	355	145	108	70	74	194
21	591	340	361	211	139	644	361	155	187	63	67	120
22	337	337	373	235	124	1130	325	141	148	63	63	90
23	282	305	319	226	164	1200	288	133	102	83	65	77
24	271	282	288	228	150	1060	265	124	98	58	68	70
25	260	282	430	276	130	887	250	120	88	55	58	67
26	253	331	391	506	130	835	235	116	96	58	54	65
27	243	328	253	741	120	1190	221	106	100	171	49	68
28	230	299	230	700	120	1010	211	104	118	152	57	65
29	208	288	233	509	---	895	199	102	104	88	57	59
30	199	282	238	403	---	815	187	100	90	87	55	55
31	189	---	235	355	---	700	---	92	---	72	60	---
TOTAL	13133	9720	12876	11218	5629	15069	13837	4926	3372	2468	2536	3017
MEAN	424	324	415	362	201	486	461	159	112	79.6	81.8	101
MAX	1590	799	1340	1070	325	1200	916	279	187	171	208	438
MIN	189	171	208	178	120	110	187	92	83	55	49	37

CAL YR 1977 TOTAL 89183 MEAN 244 MAX 1590 MIN 37
WTR YR 1978 TOTAL 97801 MEAN 268 MAX 1590 MIN 37

04240100 HARBOR BROOK AT SYRACUSE, NY

LOCATION.--Lat 43°02'08", long 76°11'17", Onondaga County, Hydrologic Unit 04140201, on right bank 145 ft (44 m) downstream from bridge on Velasko Road at Syracuse, and 2.9 mi (4.7 km) upstream from mouth.

DRAINAGE AREA.--9.63 mi² (24.9 km²).

PERIOD OF RECORD.--June 1959 to current year.

REVISED RECORDS.--WSP 2112: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 394.79 ft (120.332 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records poor. Flow includes some sewage and storm sewer inflow, some originating outside the basin.

AVERAGE DISCHARGE.--19 years, 9.38 ft³/s (0.266 m³/s) 13.23 in/yr (336 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 726 ft³/s (20.6 m³/s) July 3, 1974, gage height, 8.34 ft (2.542 m), from rating curve extended above 180 ft³/s (5.10 m³/s) on basis of slope-area measurements of peak flow; minimum daily, 1.8 ft³/s (0.051 m³/s) Sept. 22, 24, 1964, Aug. 29 to Sept. 3, Sept. 10-13, Oct. 8-10, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 150 ft³/s (4.25 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 17	0700	338	9.57	6.55	1.996	Apr. 1	1315	208	5.89	5.72	1.743
Dec. 13	2230	234	6.63	5.86	1.786	Aug. 7	1600	306	8.67	6.38	1.945
Jan. 9	0730	*360	10.2	*6.67	2.033	Sept. 11	2115	211	5.98	5.74	1.750
Mar. 21	2400	196	5.55	5.62	1.713	Sept. 19	0015	325	9.20	6.50	1.981
Mar. 26	2345	245	6.94	5.97	1.820						

Minimum daily discharge, 2.6 ft³/s (0.074 m³/s) Aug. 30, Sept. 9, 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	9.2	55	16	13	7.6	132	8.2	5.8	3.5	3.5	2.8
2	16	9.0	19	15	13	7.4	65	8.0	8.4	3.5	4.2	2.8
3	28	8.8	15	15	13	7.2	52	8.0	6.1	3.7	13	2.8
4	17	12	14	14	12	7.2	61	7.8	5.5	3.9	4.2	3.0
5	13	8.5	13	12	11	7.0	73	8.0	6.1	4.2	3.7	3.0
6	12	8.0	12	12	12	7.0	43	8.0	5.5	4.7	3.5	3.2
7	12	23	13	12	11	6.8	55	8.8	5.6	4.2	24	3.0
8	12	24	13	22	11	7.0	36	10	6.1	3.5	5.2	2.8
9	30	9.0	13	98	11	7.6	26	21	6.6	3.7	4.7	2.6
10	17	32	12	16	11	8.2	25	11	6.1	3.7	3.7	2.6
11	14	56	12	15	11	8.2	28	9.0	5.8	3.7	3.5	15
12	12	21	12	14	10	9.0	26	8.2	5.5	3.7	3.2	6.6
13	11	18	78	14	10	12	20	9.4	6.8	3.5	3.2	3.5
14	11	16	104	13	10	16	19	11	4.7	3.7	3.2	3.2
15	11	16	42	12	9.0	19	19	13	4.4	3.7	3.0	3.2
16	23	16	33	12	9.0	21	17	14	4.4	3.9	3.0	6.1
17	192	20	28	11	8.8	16	20	11	4.4	3.9	3.5	3.5
18	36	19	28	11	8.8	13	14	9.0	5.8	3.7	3.0	14
19	26	16	27	10	8.6	14	14	7.4	9.0	3.7	3.5	23
20	20	14	26	10	8.6	14	17	6.6	3.7	3.7	3.7	4.7
21	17	21	24	10	8.6	64	16	7.0	4.2	3.9	3.0	4.2
22	16	17	22	9.6	8.6	112	14	7.4	3.5	3.9	3.0	3.9
23	15	14	20	9.2	8.2	101	12	6.4	3.2	4.9	3.0	3.9
24	14	14	21	9.2	7.8	62	11	6.0	3.5	3.5	3.0	3.7
25	13	13	41	11	8.0	43	11	6.0	3.5	3.2	3.0	3.7
26	12	17	23	19	7.8	89	10	6.1	3.5	3.2	3.0	3.7
27	11	13	20	14	7.8	172	9.6	6.1	3.2	12	2.8	3.5
28	11	13	18	16	7.6	92	9.0	6.1	3.2	4.4	3.0	3.7
29	11	13	17	17	---	83	8.6	5.8	3.5	5.5	2.8	3.5
30	10	15	16	16	---	74	8.2	5.4	3.5	4.2	2.6	3.5
31	9.3	---	16	14	---	73	---	5.8	---	3.5	2.8	---
TOTAL	672.3	505.5	807	499.0	276.2	1180.2	873.4	26..9	151.3	128.0	134.5	148.7
MEAN	21.7	16.9	26.0	16.1	9.86	38.1	29.1	8.58	5.04	4.13	4.34	4.96
MAX	192	56	104	98	13	172	132	21	9.0	12	24	23
MIN	9.3	8.0	12	9.2	7.6	6.8	8.2	5.8	3.2	3.2	2.6	2.6
CFSM	2.25	1.76	2.70	1.67	1.02	3.96	3.02	.89	.52	.43	.45	.52
IN.	2.60	1.95	3.12	1.93	1.07	4.56	3.37	1.03	.58	.49	.52	.57

CAL YR 1977 TOTAL 4719.7 MEAN 12.9 MAX 192 MIN 3.8 CFSM 1.34 IN 18.23
WTR YR 1978 TOTAL 5642.0 MEAN 15.5 MAX 192 MIN 2.6 CFSM 1.61 IN 21.79

04240105 HARBOR BROOK AT HIAWATHA BOULEVARD, SYRACUSE, NY

LOCATION.--Lat 43°03'22", long 76°11'07", Onondaga County, Hydrologic Unit 04140201, on left bank 250 ft (76 m) downstream from culvert on Hiawatha Boulevard, in Syracuse, and 3,000 ft (914 m) upstream from mouth.

DRAINAGE AREA.--11.3 mi^2 (29.3 km^2).

PERIOD OF RECORD.--Occasional discharge measurements, water years 1958-70. October 1970 to current year.

REVISED RECORDS.--WDR NY-76-1: 1971-75 (P).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 365.86 ft (111.514 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair. Flow includes some sewage and storm sewer inflow, some originating outside the basin.

AVERAGE DISCHARGE.--8 years, 17.8 ft^3/s (0.504 m^3/s), 21.39 in/yr (543 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 824 ft^3/s (23.3 m^3/s) July 3, 1974, gage height, 7.91 ft (2.411 m), from rating curve extended above 160 ft^3/s (4.53 m^3/s) on basis of step-backwater computations; maximum gage height, 8.15 ft (2.484 m) Sept. 26, 1975 (backwater from Onondaga Lake); minimum discharge, 1.0 ft^3/s (0.028 m^3/s) June 25, 1971; minimum gage height, 0.34 ft (0.104 m) Sept. 20, 1976.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 290 ft^3/s (8.21 m^3/s) and maximum (*).

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 17	1130	*748	21.2	*7.56	2.304	Aug. 7	1400	528	15.0	6.46	1.969
Dec. 14	2015	330	9.35	5.28	1.609	Sept. 11	2130	497	14.1	6.29	1.917
Jan. 9	0645	432	12.2	5.91	1.801	Sept. 19	0045	632	17.9	7.00	2.134

Minimum discharge, 3.1 ft^3/s (0.088 m^3/s) Sept. 10, gage height, 1.76 ft (0.536 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	11	67	19	15	8.5	169	12	8.4	7.8	4.4	3.9
2	20	11	29	19	14	8.2	81	12	17	7.7	4.2	4.0
3	37	11	24	18	14	8.0	57	12	9.2	8.0	29	4.0
4	20	21	22	17	13	8.0	55	12	8.5	8.0	5.6	4.2
5	14	12	20	14	12	7.7	64	12	9.5	8.3	4.7	4.2
6	13	11	19	13	13	7.7	41	12	8.5	8.4	4.8	4.2
7	12	37	18	14	12	7.5	61	12	9.0	8.1	51	4.0
8	13	47	17	21	12	7.7	43	11	10	7.9	7.8	3.6
9	48	21	17	74	12	8.5	37	28	10	7.8	8.9	3.5
10	21	63	17	20	12	9.2	33	12	8.3	8.1	9.5	3.5
11	15	97	14	17	12	9.0	35	11	8.3	7.8	13	51
12	12	32	13	17	11	9.8	32	10	8.6	7.8	10	14
13	12	27	14	16	11	12	27	11	12	7.7	10	4.8
14	11	24	158	16	11	32	24	14	9.3	7.8	11	4.6
15	11	23	135	15	10	32	22	15	8.4	7.6	10	4.8
16	32	24	54	14	10	28	21	17	8.5	8.1	7.8	13
17	433	30	44	14	10	22	21	14	8.7	6.0	5.3	8.2
18	54	29	39	14	9.5	18	23	12	18	4.5	5.0	35
19	39	25	38	13	9.5	19	22	8.7	23	4.7	7.5	81
20	28	22	36	12	9.5	19	27	8.2	8.7	5.3	4.9	7.5
21	23	32	35	12	9.5	83	23	7.7	12	6.4	4.7	6.6
22	22	25	30	12	9.5	138	21	8.0	8.7	4.6	4.7	5.9
23	19	21	27	12	9.2	119	18	7.7	8.2	7.9	4.7	5.5
24	18	20	28	12	8.7	77	17	7.1	8.2	4.1	6.0	5.3
25	17	19	50	16	9.0	54	17	6.8	8.2	4.1	4.9	5.2
26	16	27	31	37	8.7	94	15	6.8	8.5	4.1	4.2	5.1
27	15	19	26	19	8.7	167	15	6.8	8.6	29	4.0	4.8
28	14	18	24	21	8.5	138	14	6.8	8.3	5.3	4.3	5.3
29	12	18	22	19	---	109	13	6.6	8.3	7.2	4.0	4.6
30	12	20	21	17	---	91	13	6.6	8.0	5.1	3.9	4.7
31	12	---	20	16	---	84	---	6.6	---	4.9	4.3	---
TOTAL	1053	797	1109	570	304.3	1435.8	1061	333.4	298.9	230.1	264.1	316.0
MEAN	34.0	26.6	35.8	18.4	10.9	46.3	35.4	10.8	9.96	7.42	8.52	10.5
MAX	433	97	158	74	15	167	169	28	23	29	51	81
MIN	11	11	13	12	8.5	7.5	13	6.6	8.0	4.1	3.9	3.5
CFSM	3.01	2.35	3.17	1.63	.97	4.10	3.13	.96	.88	.66	.75	.93
IN.	3.47	2.62	3.65	1.88	1.00	4.73	3.49	1.10	.98	.76	.87	1.04

CAL YR 1977 TOTAL 6448.2 MEAN 17.7 MAX 433 MIN 4.3 CFSM 1.57 IN 21.23
WTR YR 1978 TOTAL 7772.6 MEAN 21.3 MAX 433 MIN 3.5 CFSM 1.89 IN 25.59

04240120 LEY CREEK AT PARK STREET, SYRACUSE, NY

LOCATION.--Lat 43°04'38", long 76°10'14", Onondaga County, Hydrologic Unit 04140201, on left bank 0.2 mi (0.3 km) upstream from bridge on Park Street, and 0.4 mi (0.6 km) upstream from mouth.

DRAINAGE AREA.--29.9 mi² (77.4 km²).

PERIOD OF RECORD.--Occasional measurements water years 1959-72. December 1972 to current year.

REVISED RECORDS.--WDR NY 76-1: 1975 (M).

GAGE.--Water-stage recorder. Datum of gage is 362.84 ft (110.594 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records poor. Temporary channel storage intermittently results from backwater caused by Onondaga Lake.

AVERAGE DISCHARGE: 5 years (1974-78), 55.6 ft³/s (1.575 m³/s), 25.25 in/yr (641 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,310 ft³/s or 37.1 m³/s Sept. 26, 1975, gage height, 6.17 ft (1.881 m), from rating curve extended above 530 ft³/s (15.0 m³/s); minimum daily, 1.9 ft³/s (0.054 m³/s) Feb. 6, 7, 1977; minimum gage height, 0.28 ft (0.085 m) Feb. 6-8, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 450 ft³/s (12.7 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 17	1330	*746	21.1	4.36	1.329
Nov. 27	0230	486	13.8	3.25	.991
Dec. 14	2030	546	15.5	3.89	1.186
Mar. 21	2330	551	15.6	3.43	1.045
Mar. 27	2000	594	16.8	*5.40	1.646
Sept. 19	0400	601	17.0	3.65	1.113

Minimum daily discharge, 8.5 ft³/s (0.241 m³/s) Jan. 20; minimum gage height, 0.61 ft (0.186 m) June 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	88	38	167	70	38	22	253	16	19	14	15	11
2	85	34	99	60	36	22	294	16	68	13	15	11
3	97	28	56	54	34	22	164	16	58	13	69	11
4	85	96	57	52	33	22	142	16	23	14	46	10
5	63	50	39	52	32	22	213	18	25	13	20	11
6	59	34	43	52	31	21	154	22	19	13	15	11
7	53	120	68	56	31	21	177	23	18	13	37	13
8	35	226	35	90	30	21	206	20	33	13	28	11
9	188	99	32	200	29	21	142	93	30	13	74	10
10	118	149	41	90	28	22	107	57	20	14	90	9.5
11	70	393	30	76	27	25	88	36	16	15	26	34
12	58	175	30	50	26	40	97	26	15	13	19	126
13	46	164	85	35	25	66	97	22	38	13	17	24
14	38	152	272	27	25	166	90	19	19	14	16	15
15	29	99	496	21	29	232	53	19	16	15	16	14
16	74	90	311	17	33	135	35	19	15	30	15	39
17	631	97	241	14	30	118	25	37	14	30	19	19
18	366	116	198	12	29	108	22	22	30	16	15	28
19	304	105	198	10	28	116	22	20	77	15	13	291
20	269	93	213	8.5	28	131	26	18	32	18	21	72
21	246	121	189	16	26	272	24	43	93	17	13	39
22	213	94	226	11	25	421	23	18	107	22	11	26
23	164	63	175	10	24	381	24	16	46	25	11	20
24	133	58	143	9.5	24	286	24	15	26	20	15	16
25	115	34	255	13	23	316	23	15	19	18	16	13
26	93	77	255	206	23	147	22	13	16	18	11	13
27	73	150	150	146	23	541	22	13	16	96	11	12
28	70	46	112	94	23	368	22	13	16	53	11	16
29	52	27	124	66	---	230	19	38	15	20	14	12
30	50	22	82	50	---	257	17	24	15	20	12	10
31	44	---	59	42	---	210	---	20	---	16	13	---
TOTAL	4009	3050	4481	1710.0	793	4782	2627	763	954	637	724	947.5
MEAN	129	102	145	55.2	28.3	154	87.6	24.6	31.8	20.5	23.4	31.6
MAX	631	393	496	206	38	541	294	93	107	96	90	291
MIN	29	22	30	8.5	23	21	17	13	14	13	11	9.5
CFSM	4.31	3.41	4.85	1.85	.95	5.15	2.93	.82	1.06	.69	.78	1.06
IN.	4.99	3.79	5.57	2.13	.99	5.95	3.27	.95	1.19	.79	.90	1.18

CAL YR 1977 TOTAL 23330.1 MEAN 63.9 MAX 631 MIN 1.9 CFSM 2.14 IN 29.03
WTR YR 1978 TOTAL 25477.5 MEAN 69.8 MAX 631 MIN 8.5 CFSM 2.33 IN 31.70

04240180 NINEMILE CREEK NEAR MARIETTA, NY

LOCATION.--Lat 42°55'15", long 76°19'47", Onondaga County, Hydrologic Unit 04140201, on right bank 25 ft (8 m) upstream from bridge on Schuyler Road, 0.9 mi (1.4 km) north of Marietta, and 1.8 mi (2.9 km) downstream from Otisco Lake.

DRAINAGE AREA.--45.5 mi² (118 km²).

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1955, 1963. June 1964 to current year.

REVISED RECORDS.--WRD NY 1971: 1966(M), 1968, 1969.

GAGE.--Water-stage recorder. Altitude of gage is 760 ft (232 m), from topographic map.

REMARKS.--Records fair. Flow regulated by Otisco Lake from which water is diverted for city of Syracuse water supply.

AVERAGE DISCHARGE.--14 years, 44.0 ft³/s (1.246 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,030 ft³/s (29.2 m³/s) June 23, 1972, gage height, 8.65 ft (2.637 m); minimum, 0.80 ft³/s (0.023 m³/s) Sept. 13, 18, 19, 1966, gage height, 0.61 ft (0.186 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 497 ft³/s (14.08 m³/s) Oct. 17, gage height, 6.25 ft (1.905 m); minimum daily discharge 1.6 ft³/s (0.05 m³/s) Aug. 12-19, 21-25, Sept. 5; minimum gage height, 0.67 ft (0.204 m) Aug. 22, 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	169	153	122	123	82	88	35	6.1	2.3	2.3	1.8
2	30	166	125	122	144	80	48	32	9.4	2.3	2.0	1.9
3	49	164	122	121	163	79	41	30	10	2.6	9.7	2.1
4	66	152	120	120	157	79	70	28	7.3	3.4	2.7	1.7
5	108	103	120	120	155	78	138	30	6.9	3.0	1.7	1.6
6	107	103	120	119	155	78	147	35	5.3	2.9	1.7	1.8
7	115	106	119	119	154	77	180	33	5.6	2.9	1.7	1.8
8	131	111	119	128	152	77	203	35	5.6	3.0	1.7	1.9
9	134	106	119	186	151	77	195	40	4.7	3.3	2.6	1.9
10	125	117	118	130	150	76	184	37	4.0	3.1	2.9	2.0
11	136	134	118	126	149	76	186	35	4.0	2.8	1.7	3.3
12	172	110	117	124	148	76	196	35	4.1	2.6	1.6	3.7
13	196	109	118	123	147	76	187	38	5.6	2.6	1.6	1.7
14	221	108	162	122	146	85	176	34	4.3	2.8	1.6	1.7
15	226	120	123	122	144	91	164	28	3.5	2.8	1.6	2.8
16	243	130	80	122	143	71	151	26	3.7	2.7	1.6	4.9
17	305	133	73	122	141	12	139	31	5.3	2.6	1.6	4.3
18	68	132	72	122	139	9.3	127	29	5.9	2.4	1.6	5.6
19	93	127	72	121	137	8.7	105	28	5.3	2.3	1.6	12
20	161	126	90	121	133	8.9	95	26	4.8	2.3	1.7	4.4
21	159	128	131	121	127	37	107	27	6.2	2.5	1.6	3.9
22	157	125	129	120	114	49	103	25	5.4	2.9	1.6	4.4
23	156	123	128	120	97	54	98	23	2.5	2.5	1.6	4.5
24	155	121	127	119	94	31	90	19	2.4	2.4	1.6	4.8
25	160	121	137	121	91	16	84	16	2.3	2.4	1.6	4.8
26	172	123	127	148	88	23	78	15	2.4	2.5	1.7	13
27	174	121	126	137	85	59	71	13	3.3	4.0	1.7	23
28	172	121	125	127	84	47	60	12	4.7	4.4	1.7	24
29	173	120	125	125	---	49	43	11	2.4	2.7	1.8	25
30	174	123	123	124	---	44	38	9.4	2.3	3.5	1.8	24
31	173	---	122	123	---	47	---	7.9	---	2.4	1.8	---
TOTAL	4543	3752	3660	3897	3711	1752.9	3592	823.3	145.3	86.9	63.7	194.3
MEAN	147	125	118	126	133	56.5	120	26.6	4.84	2.80	2.05	6.48
MAX	305	169	162	186	163	91	203	40	10	4.4	9.7	25
MIN	30	103	72	119	84	8.7	38	7.9	2.3	2.3	1.6	1.6

CAL YR 1977 TOTAL 24064.0 MEAN 65.9 MAX 305 MIN 1.9
WTR YR 1978 TOTAL 26221.4 MEAN 71.8 MAX 305 MIN 1.6

04240200 NINEMILE CREEK AT CAMILLUS, NY

LOCATION.--Lat 43°02'21", long 76°18'30", Onondaga County, Hydrologic Unit 04140201, on right bank 150 ft (46 m) downstream from highway bridge on State Highway 5 (Main Street) in Camillus, and 7.2 mi (11.6 km) upstream from Onondaga Lake.

DRAINAGE AREA.--84.3 mi^2 (218 km^2).

PERIOD OF RECORD.--July 1958 to current year.

GAGE.--Water-stage recorder. Datum of gage is 398.56 ft (121.481 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records poor. Flow regulated by Otisco Lake from which water is diverted for city of Syracuse water supply.

AVERAGE DISCHARGE.--20 years, 116 ft^3/s (3.285 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,760 ft^3/s (78.2 m^3/s) Mar. 30, 1960, gage height, 8.25 ft (2.515 m); maximum gage height, 10.83 ft (3.301 m) Sept. 26, 1975; minimum discharge, 16 ft^3/s (0.45 m^3/s) Sept. 30, Oct. 1, 2, 1961; minimum gage height, 1.02 ft (0.311 m) Aug. 16, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,590 ft^3/s (45.0 m^3/s) Oct. 17, gage height, 8.03 ft (2.448 m); minimum daily, 32 ft^3/s (0.91 m^3/s) Sept. 2, 3, 5-8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	112	227	509	220	242	149	513	112	76	50	57	33
2	148	223	373	218	242	148	441	109	77	48	48	32
3	223	222	266	214	272	147	260	105	85	48	48	32
4	234	266	244	211	256	146	256	102	76	49	50	33
5	187	206	231	211	259	144	499	106	76	46	35	32
6	169	181	232	210	250	143	388	117	74	45	33	32
7	157	210	228	208	251	142	450	112	72	44	38	32
8	172	333	223	243	249	142	424	106	73	41	39	32
9	248	237	222	682	240	143	378	138	72	40	37	33
10	267	242	219	322	239	144	353	125	68	40	54	33
11	187	567	214	278	236	143	362	113	65	40	39	41
12	211	289	215	257	232	144	417	108	63	40	34	66
13	214	250	216	244	231	151	356	108	69	40	33	44
14	254	235	545	236	228	216	322	107	63	40	33	38
15	260	235	850	235	223	362	297	102	60	40	33	37
16	316	284	398	227	223	297	275	99	60	40	33	46
17	1120	297	286	224	220	158	253	109	60	40	34	44
18	523	329	237	227	216	131	230	104	61	39	34	59
19	206	272	242	223	213	129	210	99	81	39	35	174
20	293	254	223	213	209	129	213	96	70	39	40	66
21	268	260	289	229	204	298	252	104	64	39	37	49
22	254	274	288	223	196	742	221	97	63	40	36	46
23	243	240	269	214	172	581	194	93	59	40	36	43
24	236	232	262	213	166	459	179	90	56	39	36	42
25	232	223	367	229	162	232	166	87	57	38	36	40
26	243	247	300	379	156	278	154	85	55	38	35	40
27	243	237	232	410	152	737	145	83	54	46	34	53
28	239	232	223	348	151	551	138	83	58	46	33	56
29	236	228	223	295	---	419	121	81	53	52	34	57
30	233	232	240	266	---	330	115	78	51	60	34	57
31	231	---	229	253	---	319	---	77	---	57	34	---
TOTAL	8159	7764	9095	8162	6090	8254	8582	3135	1975	1343	1172	1422
MEAN	263	259	293	263	218	266	286	101	65.8	43.3	37.8	47.4
MAX	1120	567	850	682	272	742	513	138	85	60	57	174
MIN	112	181	214	208	151	129	115	77	51	38	33	32

CAL YR 1977 TOTAL 56504 MEAN 155 MAX 1120 MIN 31
WTR YR 1978 TOTAL 65153 MEAN 179 MAX 1120 MIN 32

04240300 NINEMILE CREEK AT LAKELAND, NY

LOCATION.--Lat 43°04'51", long 76°13'36", Onondaga County, Hydrologic Unit 04140201, on left bank 30 ft (9 m) downstream from bridge on State Highway 48, 0.6 mi (1.0 km) downstream from Geddes Brook, and 0.7 mi (1.1 km) upstream from mouth.

DRAINAGE AREA.--115 mi^2 (298 km^2).

PERIOD OF RECORD.--Occasional measurements, water years 1959-70. November 1970 to September 1973, July 1975 to current year.

GAGE.--Water-stage recorder. Datum of gage is 360.67 ft (109.93 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records poor. Flow regulated by Otisco Lake from which water is diverted for city of Syracuse water supply.

AVERAGE DISCHARGE.--5 years (1972, 1973, 1976-78), 275 ft^3/s (7.788 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,410 ft^3/s (68.3 m^3/s) Sept. 26, 1975, gage height 8.75 ft (2.667 m); minimum daily, 68 ft^3/s (1.93 m^3/s) Oct. 23, Nov. 1, 1971.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 1,730 ft^3/s (49.0 m^3/s) Oct. 18, Mar. 22; maximum gage height, 7.99 ft (2.435 m) Mar. 27; minimum daily discharge, 100 ft^3/s (2.83 m^3/s) Aug. 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	235	633	510	307	346	258	690	187	157	123	130	110
2	175	616	571	315	332	251	770	182	175	117	135	107
3	152	596	456	294	366	242	506	184	175	132	153	107
4	237	552	357	302	349	249	467	182	166	135	173	113
5	265	503	323	332	337	240	608	182	160	139	138	111
6	270	521	357	315	369	231	521	195	150	138	141	113
7	297	521	363	318	360	214	552	220	150	136	157	113
8	378	578	360	310	366	197	544	206	163	133	157	117
9	282	460	346	785	357	197	463	255	168	132	155	116
10	173	343	315	453	363	204	429	255	157	130	173	106
11	299	592	287	206	352	199	439	220	149	117	141	122
12	321	536	284	272	349	193	460	206	147	108	133	206
13	400	397	289	337	343	204	419	212	163	112	126	139
14	506	357	560	287	346	349	352	208	158	113	128	126
15	525	372	1570	249	346	584	315	202	149	117	123	117
16	525	416	814	318	363	536	292	186	147	120	117	137
17	1350	385	467	312	369	410	282	193	147	122	122	129
18	1730	315	388	307	378	289	262	187	153	122	107	171
19	673	304	388	299	363	270	258	180	177	120	102	436
20	621	340	446	294	346	279	277	172	166	116	114	194
21	770	397	410	310	340	629	352	177	158	117	109	148
22	709	419	439	310	323	1730	323	177	161	120	114	141
23	651	410	423	292	294	1080	282	180	152	125	113	111
24	633	397	368	294	272	737	272	175	141	128	106	116
25	612	363	372	310	265	419	274	161	144	122	104	125
26	588	369	357	517	274	297	260	147	142	120	100	123
27	646	397	326	571	279	1190	285	149	141	152	106	131
28	638	388	302	470	267	1070	258	144	141	175	117	146
29	596	366	340	416	---	681	240	150	139	129	120	142
30	575	332	369	385	---	633	210	150	132	128	120	134
31	580	---	349	366	---	596	---	153	---	115	119	---
TOTAL	16412	13175	13526	10853	9414	14658	11642	5777	4628	3913	3953	4207
MEAN	529	439	436	350	336	473	388	186	154	126	128	140
MAX	1730	633	1570	785	378	1730	770	255	177	175	173	436
MIN	152	304	284	206	265	193	210	144	132	108	100	106

CAL YR 1977 TOTAL 100538 MEAN 275 MAX 1730 MIN 82
WTR YR 1978 TOTAL 112158 MEAN 307 MAX 1730 MIN 100

04240495 ONONDAGA LAKE AT LIVERPOOL, NY

LOCATION.--Lat 43°06'01", long 76°12'34", Onondaga County, Hydrologic Unit 04140201, on north shore of Onondaga Lake at Onondaga Park Marina basin, 200 ft (61 m) southwest of Onondaga Lake Parkway, and 1.9 mi (3.1 km) upstream from outlet of lake.

DRAINAGE AREA.--285 mi^2 (738 km^2).

PERIOD OF RECORD.--October 1970 to current year. Elevation records, at Barge Canal datum, since February 1927 collected by, and in files of, New York State Department of Transportation at Syracuse.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Lake elevation regulated by operation of Erie (Barge) Canal. Area of water surface, 4.60 mi^2 (11.9 km^2).

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 369.21 ft (112.535 m) June 30, 1972; minimum, 361.54 ft (110.197 m) Mar. 13, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 368.16 ft (112.215 m) Mar. 29 (from record estimated on basis of readings at Syracuse Barge Terminal, supplied by New York State Department of Transportation); minimum, 361.54 ft (110.197 m) Mar. 13.

ELEVATION, IN FEET ABOVE NGVD, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	365.40	364.63	364.79	364.92	364.78	362.89	367.77	362.65	362.91	362.62	362.74	362.64
2	365.49	364.51	365.20	364.90	364.77	362.70	367.92	362.57	362.95	362.61	362.79	362.59
3	365.60	364.28	365.27	364.63	364.78	362.55	367.75	362.65	363.02	362.83	362.77	362.60
4	365.79	364.19	365.28	364.51	364.71	362.65	367.55	362.73	362.97	362.93	362.89	362.62
5	365.84	364.34	365.20	364.40	364.50	362.62	367.61	362.70	362.88	362.96	362.90	362.63
6	365.81	364.33	365.16	364.33	364.30	362.48	367.59	362.70	362.81	362.91	362.80	362.63
7	365.72	364.36	364.98	364.23	364.06	362.12	367.54	363.17	362.85	362.85	362.83	362.67
8	365.57	364.80	364.83	364.18	363.76	361.83	367.52	362.96	362.96	362.80	362.91	362.79
9	365.66	365.10	364.78	365.07	363.74	362.13	367.39	362.99	362.97	362.79	362.91	362.73
10	365.90	365.21	364.71	365.39	363.76	362.26	367.19	363.26	362.93	362.76	362.98	362.61
11	365.81	365.81	364.57	365.52	363.85	361.93	367.03	363.28	362.99	362.62	362.94	362.62
12	365.78	366.00	364.54	365.43	363.88	361.59	367.01	363.27	363.00	362.64	362.91	362.89
13	365.67	365.99	364.53	365.27	363.87	361.69	366.88	363.14	363.06	362.66	362.90	362.84
14	365.51	365.89	364.92	365.16	363.78	362.62	366.74	363.13	363.08	362.67	362.87	362.85
15	365.33	365.77	366.10	365.04	363.66	362.93	366.61	363.05	363.06	362.70	362.85	362.97
16	365.23	365.68	366.58	364.96	363.58	363.25	366.46	362.95	362.85	362.73	362.87	363.06
17	365.99	365.67	366.82	364.83	363.50	363.42	366.29	362.92	362.88	362.75	362.85	363.05
18	366.69	365.75	366.92	364.73	363.41	363.63	366.00	362.86	362.89	362.73	362.64	362.98
19	366.74	365.76	366.92	364.53	363.29	363.80	365.59	362.79	362.97	362.70	362.56	363.16
20	366.76	365.72	366.81	364.49	363.17	363.93	365.27	362.66	362.97	362.72	362.62	362.89
21	366.70	365.62	366.74	364.46	363.06	364.17	365.04	362.61	362.97	362.73	362.63	363.12
22	366.50	365.54	366.66	364.35	362.99	365.48	364.86	362.87	363.01	362.77	362.75	362.84
23	366.25	365.33	366.50	364.30	362.86	366.34	364.72	362.92	362.96	362.82	362.71	362.40
24	365.99	365.16	366.34	364.28	362.67	366.93	364.58	362.93	363.12	362.78	362.59	362.69
25	365.74	364.96	366.26	364.26	362.87	366.94	364.41	362.80	363.03	362.72	362.51	362.87
26	365.53	364.89	366.26	364.45	363.05	367.22	364.21	362.68	362.94	362.72	362.39	362.88
27	365.38	364.80	366.04	364.84	363.11	367.67	363.84	362.83	362.86	362.68	362.61	362.95
28	365.23	364.67	365.80	364.98	363.07	368.12	363.40	362.86	362.82	362.93	362.79	362.95
29	365.07	364.47	365.54	364.91	---	368.16	363.12	362.85	362.79	362.79	362.88	362.91
30	364.92	364.47	365.29	364.78	---	368.00	362.89	362.90	362.72	362.68	362.91	362.75
31	364.78	---	365.07	364.74	---	367.82	---	362.89	---	362.50	362.75	---
MEAN	365.75	365.12	365.66	364.73	363.67	364.19	366.03	362.89	362.94	362.75	362.78	362.81
MAX	366.76	366.00	366.92	365.52	364.78	368.16	367.92	363.28	363.12	362.96	362.98	363.16
MIN	364.78	364.19	364.53	364.18	362.67	361.59	362.89	362.57	362.72	362.50	362.39	362.40

CAL YR 1977 MEAN 363.80 MAX 366.92 MIN 362.22
WTR YR 1978 MEAN 364.11 MAX 368.16 MIN 361.59

04242500 EAST BRANCH FISH CREEK AT TABERG, NY

LOCATION.--Lat 43°18'06", long 75°37'09", Oneida County, Hydrologic Unit 04140202, on left bank at downstream side of bridge on Main Street at Taberg, just downstream from Furnace Creek, 300 ft (91 m) upstream from bridge on State Highway 69, and 2.8 mi (4.5 km) upstream from confluence of East and West Branches near Blossvale.

DRAINAGE AREA.--188 mi^2 (487 km^2).

PERIOD OF RECORD.--April 1923 to current year.

REVISED RECORDS.--WSP 604: 1924. WSP 759: Drainage area. WSP 1034: 1944. WSP 1054: 1923-45.

GAGE.--Water-stage recorder. Datum of gage is 490.12 ft (149.389 m) National Geodetic Vertical Datum of 1929. Prior to May 20, 1969, at datum 1.00 ft (0.305 m) higher.

REMARKS.--Records good, except those for winter periods, which are poor. Diversion above station for municipal supply by cities of Rome and Oneida. Diurnal fluctuation at low flow caused by diversion and small power operations upstream.

AVERAGE DISCHARGE.--55 years, 543 ft^3/s (15.38 m^3/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,500 ft^3/s (411 m^3/s) June 22, 1972, gage height, 11.71 ft (3.569 m); minimum, 4.9 ft^3/s (0.14 m^3/s) Aug. 15, 16, 1949.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 4,900 ft^3/s (140 m^3/s):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Sept. 12	1115	7,880	223	7.91	2.411

Minimum discharge, 14 ft^3/s (0.40 m^3/s) Aug. 16, gage height, 0.32 ft (0.098 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1670	168	1630	380	580	160	1000	1540	153	100	141	58
2	3220	189	2190	340	490	150	1300	1130	158	90	115	58
3	1700	189	1300	310	420	160	1200	1080	244	82	240	53
4	1080	760	900	280	350	170	1100	1210	222	75	521	53
5	784	1820	600	300	300	160	1400	1330	191	79	256	47
6	655	893	560	320	290	170	1500	1450	236	74	149	44
7	559	730	560	350	280	160	1600	1520	209	64	115	40
8	499	1610	500	380	270	170	1400	1640	490	60	102	32
9	2110	1480	450	1800	260	190	1100	3420	644	83	168	29
10	2500	1080	400	2300	250	211	1000	3040	355	70	198	24
11	1230	2640	380	1700	250	210	1300	1690	233	62	244	139
12	893	1580	380	1400	250	210	2500	1160	177	62	241	4830
13	724	982	440	1100	240	220	3400	947	244	58	239	1660
14	600	736	1000	900	220	240	3760	828	395	52	188	590
15	638	611	2100	750	210	350	2400	766	287	47	60	379
16	677	689	1700	640	210	450	1780	692	199	43	35	462
17	1280	1150	1100	580	210	500	1850	772	160	43	51	439
18	1650	1510	820	500	190	480	1870	700	227	42	55	302
19	975	1250	700	480	180	460	2440	797	417	36	55	1420
20	712	926	600	440	180	430	2750	609	430	33	87	841
21	584	1240	560	410	170	470	2590	748	509	32	69	466
22	534	2210	520	380	170	660	1830	726	1000	42	57	347
23	529	1250	500	360	170	900	2110	509	480	56	52	244
24	471	1530	500	340	180	820	2440	402	273	63	56	191
25	417	1280	700	400	190	720	2780	328	191	44	71	157
26	391	1020	600	700	170	700	3070	280	151	39	65	160
27	371	760	520	1000	160	800	3080	244	138	139	62	127
28	359	700	480	1400	160	1000	2940	219	130	418	58	127
29	351	640	440	1100	---	1000	2820	198	125	227	65	125
30	343	616	400	900	---	940	2460	184	115	214	64	118
31	335	---	420	680	---	860	---	164	---	180	58	---
TOTAL	28841	32239	23950	22920	7000	14121	62770	30323	8783	2709	3937	13562
MEAN	930	1075	773	739	250	456	2092	978	293	87.4	127	452
MAX	3220	2640	2190	2300	580	1000	3760	3420	1000	418	521	4830
MIN	335	168	380	280	160	150	1000	164	115	32	35	24
†	24.3	23.5	24.7	25.2	26.8	27.0	26.0	24.9	26.9	30.5	27.7	26.5

CAL YR 1977 TOTAL 264816 MEAN 726 MAX 4870 MIN 47 † 27.0
WTR YR 1978 TOTAL 251155 MEAN 688 MAX 4830 MIN 24 † 26.2

† Diversion, in cubic feet per second, by cities of Rome and Oneida for water supply. (Data supplied by respective cities)

04243500 ONEIDA CREEK AT ONEIDA, NY

LOCATION.--Lat 43°05'51", long 75°38'22", Oneida County, Hydrologic Unit 04140202, on right bank 70 ft (21 m) upstream from bridge on Sconondoa Street at Oneida, and 500 ft (152 m) downstream from Sconondoa Creek.

DRAINAGE AREA.--113 mi^2 (293 km^2).

PERIOD OF RECORD.--October 1949 to current year.

REVISED RECORDS.--WSP 2112: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 409.33 ft (124.764 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods and those above 300 ft^3/s (8.50 m^3/s), which are fair. Occasional regulation by small mills upstream from station.

AVERAGE DISCHARGE.--29 years, 167 ft^3/s (4.729 m^3/s), 20.07 in/yr (510 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,100 ft^3/s (314 m^3/s) Oct. 9, 1976, gage height, 15.01 ft (4.575 m); minimum. 12 ft^3/s (0.34 m^3/s) Aug. 5, 6, 1962, Oct. 28, 1964; minimum gage height, 1.30 ft (0.396 m) Aug. 3, 6, 1955, Aug. 17, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,900 ft^3/s (53.8 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 17	1945	*4,320	122	*12.19	3.716
Nov. 11	0700	2,000	56.6	8.32	2.536
Dec. 15	0215	2,790	79.0	9.96	3.036
Jan. 9	1045	3,200	90.6	10.70	3.261
Mar. 22	0300	1,940	54.9	8.17	2.490
Mar. 27	1930	1,980	56.1	8.26	2.518
Apr. 1	2230	2,060	58.3	8.46	2.579

Minimum discharge, 26 ft^3/s (0.74 m^3/s) July 27; minimum gage height, 1.64 ft (0.500) Sept. 10.

REVISIONS.--The peak discharges and annual maximum (*) for some water years have been revised as shown in the following table. They supersede figures given in the publications indicated.

Publication WRD NY	Publication WSP	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
- -	1677,1727, 1207	Dec. 4, 1950	1245	2,170	61.5	8.90	2.713
		Jan. 4, 1951	0415	2,740	77.6	9.81	2.990
		Feb. 21, 1951	1945	3,040	86.1	10.25	3.124
		Mar. 31, 1951	0630	2,150	60.9	8.86	2.701
		Apr. 13, 1951	0615	2,570	72.8	9.56	2.914
		July 18, 1951	2000	*4,610	131	*12.53	3.819
- -	1677,1727, 1437	Oct. 31, 1955	0330	1,930	54.7	8.36	2.548
		Mar. 7, 1956	1200	2,730	77.3	9.80	2.987
		Apr. 4, 1956	2315	*4,010	114	*11.83	3.606
- -	1677,1912, 1557	June 2, 1958	0400	*2,520	71.4	*9.46	2.883
1961	1912	Feb. 26, 1961	0300	*4,480	127	*12.38	3.773
1963	1912	Mar. 26, 1963	2215	*4,010	114	*11.83	3.606
1964	1912	Dec. 9, 1963	0900	1,950	55.2	8.40	2.560
		Jan. 25, 1964	1845	3,620	103	10.97	3.344
		Mar. 5, 1964	1030	*4,580	130	*12.49	3.807
1972	- -	Mar. 2, 1972	1900	5,280	150	12.95	3.947
		Mar. 22, 1972	2245	2,210	62.6	8.92	2.719
		June 16, 1972	0500	3,490	98.8	10.81	3.295
		June 22, 1972	0930	*9,260	262	*14.61	4.453
1976	- -	Jan. 27, 1976	1530	[a]1,800	51.0	[b]8.03	2.448
		Feb. 19, 1976	0845	2,680	75.9	9.75	2.972
		Mar. 5, 1976	0530	1,700	48.1	7.53	2.295
		Apr. 16, 1976	1330	1,790	50.7	7.78	2.371
		May 20, 1976	1100	2,720	77.0	9.83	2.996
		June 23, 1976	1400	1,910	54.1	8.09	2.466
		Aug. 29, 1976	0030	*3,460	98.0	*11.13	3.392

a About
b Backwater from ice.

04243500 ONEIDA CREEK AT ONEIDA, NY--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	592	122	1030	202	230	110	1360	118	59	42	45	36
2	780	116	715	172	210	100	1180	120	76	40	41	32
3	436	114	414	174	190	100	735	108	176	38	50	31
4	385	159	318	176	220	110	618	101	80	38	80	32
5	259	165	245	154	200	130	1220	106	69	37	48	31
6	224	142	245	140	210	100	778	123	64	36	44	31
7	192	248	237	133	170	100	833	150	58	35	94	30
8	172	824	232	185	160	100	679	123	76	34	165	29
9	750	444	212	1730	150	100	444	169	76	34	73	29
10	682	370	222	646	150	110	385	161	66	35	97	28
11	346	1330	234	350	150	110	456	118	55	35	58	34
12	292	537	256	260	140	110	739	97	50	32	53	77
13	232	373	358	240	140	140	515	94	80	31	169	48
14	197	298	1130	220	130	250	394	87	77	30	76	38
15	335	262	1960	200	130	700	305	92	58	30	55	37
16	419	311	903	200	140	608	259	94	52	32	49	72
17	3040	295	608	190	140	394	227	140	47	47	45	57
18	1650	366	406	200	130	292	219	112	51	34	41	52
19	828	335	331	170	120	277	199	110	129	31	39	758
20	532	274	292	220	120	298	237	91	76	30	43	202
21	366	346	295	200	120	804	248	112	91	29	42	106
22	302	381	280	160	120	1360	214	92	159	28	39	77
23	259	265	245	150	120	1200	183	80	78	28	36	62
24	224	274	229	160	120	914	165	74	59	32	39	54
25	204	227	564	350	110	589	159	70	52	29	43	50
26	192	350	343	640	110	684	148	68	46	28	40	46
27	174	280	240	660	110	1600	140	65	48	92	36	43
28	163	251	210	520	110	1120	131	63	96	321	35	42
29	150	234	230	370	---	894	123	62	57	64	35	42
30	136	234	240	290	---	730	120	59	48	65	35	40
31	127	---	192	250	---	695	---	58	---	50	36	---
TOTAL	14640	9927	13416	9712	4150	14829	13412	3117	2211	1467	1761	2246
MEAN	472	331	433	313	148	478	447	101	73.7	47.3	57.5	74.9
MAX	3040	1330	1960	1730	230	1600	1360	169	176	321	169	758
MIN	127	114	192	133	110	100	120	58	47	28	35	28
CFSM	4.18	2.93	3.83	2.77	1.31	4.23	3.96	.89	.65	.42	.51	.66
IN.	4.82	3.27	4.42	3.20	1.37	4.88	4.42	1.03	.73	.48	.59	.74

CAL YR 1977 TOTAL 102284 MEAN 280 MAX 3040 MIN 33 CFSM 2.48 IN 33.67
WTR YR 1978 TOTAL 90908 MEAN 249 MAX 3040 MIN 28 CFSM 2.20 IN 29.93

04245000 LIMESTONE CREEK AT FAYETTEVILLE, NY

LOCATION.--Lat 43°01'48", long 76°00'49", Onondaga County, Hydrologic Unit 04140202, on left bank 100 ft (30 m) downstream from bridge on Genesee Street at Fayetteville, and 8 mi (13 km) upstream from mouth.

DRAINAGE AREA.--85.5 mi^2 (221 km^2), not including 14.0 mi^2 (36.3 km^2) of Middle Branch Tioughnioga Creek basin, flow from which may be completely diverted into Limestone Creek basin through DeRuyter Reservoir, and 0.8 mi^2 (2.07 km^2) in closed basin.

PERIOD OF RECORD.--November 1939 to current year.

REVISED RECORDS.--WSP 954: 1941. WSP 1912: 1958(M).

GAGE.--Water-stage recorder. Datum of gage is 427.73 ft (130.372 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Canal diverts water from Limestone Creek about 3 mi (5 km) above station and returns water to creek about 400 ft (122 m) above station. Flow regulated by DeRuyter Reservoir.

AVERAGE DISCHARGE.--38 years (1940-78), 144 ft^3/s (4.078 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,010 ft^3/s (199 m^3/s) Mar. 28, 1950, gage height, 7.78 ft (2.371 m), from rating curve extended above 3,500 ft^3/s (99.1 m^3/s); maximum gage height, 8.66 ft (2.640 m) July 3, 1974; minimum discharge, 1.4 ft^3/s (0.040 m^3/s) Aug. 19, 1969.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,500 ft^3/s (42.5 m^3/s) and maximum (*):

Date	Time	Discharge		Gage height		Date	Time	Discharge		Gage height	
		(ft^3/s)	(m^3/s)	(ft)	(m)			(ft^3/s)	(m^3/s)	(ft)	(m)
Oct. 17	1400	*3,920	111	*7.72	2.353	Mar. 27	1900	1,570	44.5	5.05	1.539
Dec. 15	0930	1,950	55.2	5.55	1.692	Apr. 1	2400	1,690	47.9	5.22	1.591
Jan. 9	0530	1,940	54.9	5.54	1.689						

Minimum discharge, 25 ft^3/s (0.71 m^3/s) July 25-27, gage height, 1.52 ft (0.463 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	379	133	722	160	218	93	1080	113	48	42	45	37
2	526	129	538	155	198	91	1060	115	51	38	39	34
3	513	124	301	145	188	85	437	109	91	37	48	33
4	429	162	258	145	170	95	413	103	61	39	82	34
5	264	167	221	150	198	118	958	107	53	36	50	34
6	238	140	227	147	178	87	524	115	51	33	42	32
7	203	178	215	143	191	89	634	113	47	32	61	31
8	183	417	203	175	147	87	520	95	54	32	224	31
9	436	284	190	1110	138	89	322	143	56	31	84	39
10	483	308	186	639	136	89	287	155	56	32	101	42
11	255	838	190	332	133	87	362	107	44	31	63	56
12	233	397	183	248	129	89	497	91	41	29	56	233
13	200	294	191	227	129	105	336	87	63	27	58	97
14	178	258	952	206	124	191	284	84	65	27	48	54
15	234	245	1620	186	111	511	236	84	48	28	42	47
16	292	267	743	173	115	347	209	82	41	48	39	76
17	2530	287	429	173	120	254	188	120	38	85	38	82
18	1520	362	336	236	111	206	175	95	48	41	36	72
19	604	264	347	160	105	198	167	87	89	32	34	457
20	393	239	294	242	103	203	191	74	53	29	39	161
21	311	245	287	218	105	533	212	91	175	28	38	98
22	267	258	277	145	99	1120	183	80	373	28	38	80
23	236	212	242	136	101	1100	150	70	95	28	38	71
24	209	209	230	131	97	861	138	65	68	28	38	64
25	190	193	393	147	97	450	129	61	56	26	42	58
26	178	233	258	450	95	515	138	58	50	25	41	65
27	178	209	181	599	93	1260	133	56	53	53	37	64
28	167	206	165	609	93	1020	124	53	93	188	36	64
29	157	198	162	450	---	659	120	50	58	59	37	62
30	147	206	178	304	---	480	115	50	47	95	36	58
31	140	---	183	245	---	475	---	48	---	56	37	---
TOTAL	12273	7662	10902	8586	3722	11587	10322	2761	2166	1343	1647	2366
MEAN	396	255	352	277	133	374	344	89.1	72.2	43.3	53.1	78.9
MAX	2530	838	1620	1110	218	1260	1080	155	373	188	224	457
MIN	140	124	162	131	93	85	115	48	38	25	34	31

CAL YR 1977 TOTAL 76821 MEAN 210 MAX 2530 MIN 28
WTR YR 1978 TOTAL 75337 MEAN 206 MAX 2530 MIN 25

04245200 BUTTERNUT CREEK NEAR JAMESVILLE, NY

LOCATION.--Lat 42°56'02", long 76°03'44", Onondaga County, Hydrologic Unit 04140202, on left bank 15 ft (5 m) downstream from bridge on Walberger Road, 125 ft (38 m) downstream from tributary from Stebbins Gulf, 2.2 mi (3.5 km) upstream from Jamesville Reservoir, and 4 mi (6 km) south of Jamesville.

DRAINAGE AREA.--32.2 mi² (83.4 km²).

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1955-58. July 1958 to current year.

REVISED RECORDS.--WSP 2112: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 717.93 ft (218.825 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records poor.

AVERAGE DISCHARGE.--20 years, 51.4 ft³/s (1.456 m³/s), 21.68 in/yr (551 mm/yr).

EXTREMES FOR PERIOD OF RECORD.-Maximum discharge, 2,820 ft³/s (79.9 m³/s) July 3, 1974, gage height, 7.84 ft (2.390 m); maximum gage height, 8.38 ft (2.554 m) Oct. 17, 1977; minimum discharge, 2.0 ft³/s (0.057 m³/s) Sept. 27, 1959, gage height, 2.26 ft (0.689 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 550 ft³/s (15.6 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 17	1200	*1,720	48.7	*8.38	2.554	Mar. 27	1830	663	18.8	7.35	2.240
Dec. 14	2400	903	25.6	7.65	2.332	Apr. 1	1900	921	26.1	7.67	2.338
Jan. 9	0430	1,000	28.3	7.76	2.365	Apr. 5	0530	567	16.1	7.21	2.198

Minimum daily discharge, 7.0 ft³/s (0.20 m³/s) Sept. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	132	59	213	60	79	29	567	37	21	15	18	9.2
2	137	56	130	57	74	29	383	36	27	14	15	7.5
3	172	53	90	57	70	29	160	34	32	14	14	7.5
4	135	67	78	56	78	28	155	33	22	17	16	8.7
5	84	58	70	52	64	28	398	38	20	15	13	7.5
6	75	52	66	49	74	28	173	43	19	13	14	7.4
7	64	64	62	50	60	28	242	39	19	12	21	7.2
8	58	102	60	78	56	28	165	35	24	12	24	7.0
9	136	72	56	635	54	27	111	48	24	12	17	10
10	126	115	58	168	50	27	92	44	21	12	22	13
11	75	296	56	120	48	27	106	38	17	12	15	20
12	67	126	56	110	45	27	120	35	15	11	18	45
13	59	102	56	100	42	30	87	34	31	10	15	25
14	55	92	378	84	40	67	76	33	24	10	12	15
15	69	90	642	78	39	97	61	32	18	10	11	13
16	100	92	246	76	39	59	56	33	15	36	11	26
17	980	102	157	73	37	54	55	43	15	26	10	21
18	567	107	126	76	35	54	52	37	15	14	9.7	25
19	213	87	115	56	34	55	52	34	17	11	9.2	78
20	141	82	95	62	33	59	58	32	16	10	14	32
21	113	87	92	82	32	143	59	37	38	10	10	24
22	100	84	84	69	32	281	54	32	43	11	8.7	20
23	87	76	75	59	31	277	51	29	24	10	8.3	18
24	81	78	73	58	30	210	51	28	19	9.2	9.2	17
25	76	72	115	63	30	111	51	26	17	8.3	11	16
26	73	84	76	308	29	134	59	25	16	8.7	9.7	15
27	69	72	66	274	29	480	43	24	24	43	8.3	15
28	67	71	62	170	29	349	42	23	26	59	8.3	15
29	61	72	64	117	---	213	38	22	19	24	8.7	14
30	58	75	66	99	---	139	37	20	17	33	8.3	13
31	59	---	71	90	---	130	---	19	---	20	10	---
TOTAL	4289	2645	3658	3486	1293	3277	3654	1023	655	522.2	399.4	552.0
MEAN	138	88.2	118	112	46.2	106	122	33.0	21.8	16.8	12.9	18.4
MAX	980	296	642	635	79	480	567	48	43	59	24	78
MIN	55	52	56	49	29	27	37	19	15	8.3	8.3	7.0
CFSM	4.29	2.74	3.67	3.48	1.44	3.29	3.79	1.03	.68	.52	.40	.57
IN.	4.95	3.06	4.23	4.03	1.49	3.79	4.22	1.18	.76	.60	.46	.64

CAL YR 1977 TOTAL 25223.5 MEAN 69.1 MAX 980 MIN 7.2 CFSM 2.15 IN 29.14
WTR YR 1978 TOTAL 25453.6 MEAN 69.7 MAX 980 MIN 7.0 CFSM 2.17 IN 29.41

04246000 ONEIDA LAKE AT BREWERTON, NY

LOCATION.--Lat 43°14'25", long 76°08'30", Onondaga County, Hydrologic Unit 04140202, at west end of Oneida Lake, 100 ft (30 m) west of bridge on U.S. Highway 11, at Brewerton.

DRAINAGE AREA.--1,382 mi^2 (3,579 km^2), at dam at Caughdenoy.

PERIOD OF RECORD.--November 1951 to current year. April 1904 to September 1925 in reports of State Engineer and Surveyor, published as "Oneida River at Brewerton."

REVISED RECORDS.--WSP 2112: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (1.01 ft or 0.308 m, Barge Canal datum). November 1951 to September 1975, at datum 360.99 ft (110.030 m) higher.

REMARKS.--Elevation of lake surface regulated by taintor-gate dam on Oneida River at Caughdenoy and gates on Oneida Canal and Erie (Barge) Canal. Lake volume below 369 ft (112 m) elevation, 49,600 mil ft^3 (1,404 hm^3). Area of water surface, 79.8 mi^2 (207 km^2); axes, 20.9 mi (33.6 km) by 5.5 mi (8.8 km); shoreline length, 54.7 mi (88.0 km).

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 372.83 ft (113.639 m) June 26, 1972; minimum daily, 366.41 ft (111.682 m) Feb. 18, 19, 1961.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 29, 1936, reached a stage of 373.5 ft (113.84 m) above mean sea level, from Corps of Engineers report "Flood Plain Information, Oneida Creek, New York."

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 371.46 ft (113.221 m) Apr. 19; minimum, 367.28 ft (111.947 m) Mar. 14.

ELEVATION, IN FEET ABOVE NGVD, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	369.98	369.45	370.14	369.39	369.27	367.80	370.24	370.21	369.66	369.63	369.90	369.42
2	369.99	369.36	370.01	369.30	369.28	367.76	370.40	370.19	369.72	369.66	369.88	369.45
3	370.06	369.32	370.17	369.20	369.24	367.73	370.59	370.07	369.72	369.70	369.82	369.42
4	370.02	369.36	370.15	369.13	369.20	367.67	370.66	370.00	369.71	369.68	369.79	369.40
5	370.04	369.54	370.45	369.03	369.14	367.64	370.75	370.02	369.66	369.59	369.83	369.40
6	369.92	369.69	370.12	368.95	369.07	367.62	370.91	370.01	369.76	369.63	369.77	369.41
7	369.89	370.10	369.92	368.90	369.02	367.58	370.99	370.01	369.82	369.64	369.76	369.36
8	369.98	370.18	370.05	368.84	368.96	367.55	371.05	370.13	369.80	369.64	369.71	369.43
9	369.84	369.99	369.76	368.98	368.91	367.51	371.09	370.12	369.77	369.64	369.72	369.34
10	369.95	370.02	369.73	369.02	368.84	367.47	371.06	370.13	369.84	369.58	369.78	369.44
11	370.13	370.14	369.74	369.10	368.77	367.44	371.01	370.22	369.83	369.61	369.81	369.39
12	370.03	370.35	369.66	369.16	368.72	367.41	371.01	370.19	369.77	369.61	369.73	369.60
13	369.95	370.37	369.58	369.21	368.66	367.40	371.01	370.24	369.64	369.66	369.66	369.83
14	369.76	370.35	369.62	369.22	368.60	367.40	371.07	370.21	369.58	369.65	369.61	369.89
15	369.70	370.38	369.86	369.23	368.55	367.43	371.22	370.03	369.64	369.66	369.57	369.65
16	369.82	370.28	370.14	369.20	368.48	367.56	371.24	369.77	369.72	369.65	369.50	369.53
17	369.80	370.19	370.33	369.17	368.41	367.62	371.18	369.72	369.76	369.64	369.39	369.47
18	370.24	370.08	370.43	369.16	368.36	367.70	371.15	369.68	369.77	369.68	369.38	369.49
19	370.42	370.11	370.41	369.11	368.30	367.74	371.22	369.67	369.78	369.70	369.41	369.70
20	370.41	370.30	370.38	369.07	368.24	367.79	370.99	369.65	369.86	369.69	369.34	369.72
21	370.43	370.22	370.32	369.07	368.18	367.86	370.92	369.57	369.94	369.69	369.37	369.63
22	370.36	370.21	370.24	369.01	368.12	368.09	370.93	369.60	369.95	369.70	369.39	369.56
23	370.30	370.43	370.17	368.94	368.07	368.38	370.88	369.64	369.99	369.66	369.38	369.57
24	370.24	370.20	370.08	368.88	368.02	368.68	370.81	369.65	369.97	369.71	369.40	369.53
25	370.11	370.30	369.99	368.85	367.98	368.91	370.76	369.58	369.96	369.75	369.44	369.43
26	370.00	370.11	369.95	368.88	367.93	369.10	370.70	369.63	369.91	369.73	369.41	369.49
27	369.89	370.12	369.87	368.94	367.89	369.31	370.63	369.66	369.82	369.75	369.46	369.49
28	369.75	370.15	369.77	369.05	367.85	369.61	370.55	369.67	369.68	369.84	369.50	369.41
29	369.68	370.08	369.66	369.15	---	369.84	370.49	369.68	369.65	369.91	369.38	369.50
30	369.58	370.15	369.56	369.22	---	370.00	370.34	369.69	369.62	369.90	369.43	369.55
31	369.55	---	369.46	369.26	---	370.12	---	369.66	---	370.04	369.45	---
MEAN	370.00	370.05	369.99	369.08	368.57	368.12	370.86	369.88	369.78	369.70	369.58	369.52
MAX	370.43	370.43	370.45	369.39	369.28	370.12	371.24	370.24	369.99	370.04	369.90	369.89
MIN	369.55	369.32	369.46	368.84	367.85	367.40	370.24	369.57	369.58	369.58	369.34	369.34

CAL YR 1977 MEAN 369.49 MAX 371.50 MIN 366.91
WTR YR 1978 MEAN 369.60 MAX 371.24 MIN 367.40

04246500 ONEIDA RIVER AT CAUGHDENOY, NY

LOCATION.--Lat 43°14'49", long 76°10'12", Oswego County, Hydrologic Unit 04140202, on left bank at point of diversion to New York State Erie (Barge) Canal, 1.6 mi (2.6 km) downstream from Oneida Lake, and 2.6 mi (4.2 km) upstream from navigation dam at Caughdenoy.

DRAINAGE AREA.--1,382 mi² (3,579 km²); 1902-9, 1,439 mi² (3,727 km²).

PERIOD OF RECORD.--September 1902 to December 1909 (published as "near Euclid"), January 1910 to December 1912, and October 1947 to current year in reports of Geological Survey. September 1902 to December 1909 and January 1910 to September 1925 in reports of State Engineer and Surveyor.

REVISED RECORDS.--WSP 2112: Drainage area.

GAGE.--Base gage: Water-stage recorder. Datum of gage is 362.00 ft (110.338 m) Barge Canal datum. Prior to June 5, 1907, headwater readings, and June 5, 1907 to Dec. 31, 1909, nonrecording gage readings at former Oak Orchard State Dam 5.5 mi (8.8 km) downstream at different datum. Jan. 1, 1910 to Dec. 31, 1912, nonrecording gage at site 2.5 mi (4.0 km) downstream from present site at different datum. From Oct. 9, 1947 to Nov. 7, 1951, water-stage recorder at site 2.5 mi (4.0 km) downstream at present datum.

Auxiliary gage: Water-stage recorder at site 2.5 mi (4.0 km) downstream, 350 ft (107 m) upstream from navigation dam at present datum (base gage site 1947-51).

Supplementary gage: Water-stage recorder at site 2.6 mi (4.2 km) downstream, 180 ft (55 m) downstream from navigation dam at present datum.

REMARKS.--Records fair. Jan. 1, 1910 to Dec. 31, 1912: Flow over dam computed on basis of coefficient determined for model of dam of same general type; flow through gate and diversion through lock culverts estimated by theoretical calculations.

1947 to current year: Record represents total discharge at Caughdenoy, including flow in Oneida and Erie (Barge) Canals. Considerable seasonal regulation by operation of gates in Oneida and Erie (Barge) Canals with a large amount of natural storage in Oneida Lake. Occasional large diurnal fluctuations caused by seiche in Oneida Lake. Water may be diverted into or received from Mohawk River basin through summit level of Erie (Barge) Canal between New London and Utica. Nearly all of flow from 14 mi² (36 km²) of Tioughnioga River basin may be diverted into De Ruyter Reservoir, in Oswego River basin.

COOPERATION.--Records of gate openings, lockages, and elevations of water surface in Erie (Barge) Canal above and below lock 23, furnished by New York State Department of Transportation.

AVERAGE DISCHARGE.--41 years (1902-12, 1947-78), 2,577 ft³/s (72.98 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 13,800 ft³/s (391 m³/s) Mar. 25-27, 1903; minimum daily, 52 ft³/s (1.47 m³/s) Oct. 24, 1910.

1947 to current year: Maximum daily discharge, 10,100 ft³/s (286 m³/s) June 25, 1972; minimum daily, 62 ft³/s (1.76 m³/s) July 29, 1950.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 7,750 ft³/s (219 m³/s) Apr. 16; minimum daily, 187 ft³/s (5.30 m³/s) Sept. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5610	4190	5870	4760	4550	2730	6100	5920	886	551	1720	205
2	5610	3710	5600	4590	4570	2650	6350	5890	899	553	1700	204
3	5730	3700	5890	4430	4520	2650	6680	5690	884	551	1690	200
4	5600	3800	5860	4340	4440	2520	6800	5590	852	549	1690	202
5	5610	4300	6360	4190	4370	2500	6930	3890	813	460	1700	191
6	5410	4700	5810	4070	4360	2470	7200	2380	811	252	1670	191
7	5350	5400	5460	4000	4260	2420	7360	2450	802	242	1670	195
8	5510	5600	5690	3920	4100	2390	7440	2630	883	235	1670	212
9	5280	5280	5320	3940	4010	2350	7510	4140	1280	229	1690	208
10	5470	5260	5280	4110	4340	2270	7480	5300	1960	213	1700	199
11	5770	5320	5370	4260	4240	2270	7370	5660	1930	192	1920	187
12	5600	5540	5200	4380	4120	2230	7370	5640	1930	196	2260	460
13	5520	5580	5080	4470	4020	2240	7360	5680	1910	206	2240	1580
14	5460	5570	5160	4470	3920	2250	7460	5670	1890	209	2230	3840
15	5300	5620	5480	4490	3790	2250	7710	5410	1490	214	2240	4420
16	5280	5740	5940	4440	3710	2390	7750	5140	566	212	1920	4340
17	5250	5920	6270	4400	3600	2480	7620	3680	281	211	1360	4300
18	5990	5760	6430	4390	3510	2590	7480	2720	280	227	987	2780
19	6290	5780	6400	4320	3400	2620	7630	2700	285	223	729	1370
20	6290	6110	6360	4260	3320	2730	7230	2720	292	224	765	3840
21	6340	5980	6240	4260	3230	2860	7100	2650	886	232	497	4370
22	6220	5960	6120	4160	3130	2820	7100	2500	1590	227	221	3800
23	6150	6340	6000	4060	3060	3210	7020	2090	2230	227	206	2230
24	6050	5940	5860	3980	3000	3630	6900	2000	2690	217	195	2240
25	5830	6120	5700	3940	2960	3960	6830	1190	2670	217	191	1260
26	5620	5780	5640	3970	2900	4260	6730	695	2640	215	194	583
27	5440	5800	5520	4050	2840	4570	6610	725	2620	269	202	471
28	5190	5870	5340	4220	2790	5030	6470	751	2600	263	218	253
29	5070	5760	5170	4360	---	5400	6360	766	1640	209	244	241
30	4900	5880	5000	4470	---	5690	6120	806	561	191	263	226
31	4570	---	4840	4540	---	5900	---	844	---	1190	231	---
TOTAL	173310	162310	176260	132240	105060	96330	212070	103917	41051	9406	36213	44798
MEAN	5591	5410	5686	4266	3752	3107	7069	3352	1368	303	1168	1493
MAX	6340	6340	6430	4760	4570	5900	7750	5920	2690	1190	2260	4420
MIN	4570	3700	4840	3920	2790	2230	6100	695	280	191	191	187

CAL YR 1977 TOTAL 1298809 MEAN 3558 MAX 8230 MIN 212
WTR YR 1978 TOTAL 1292965 MEAN 3542 MAX 7750 MIN 187

04249000 OSWEGO RIVER AT LOCK 7, OSWEGO, NY
(National stream-quality accounting network station)

LOCATION.--Lat 43°27'06", long 76°30'20", Oswego County, Hydrologic Unit 04140203, on right bank at lock 7 in Oswego, 0.8 mi (1.3 km) upstream from mouth. Water-quality sampling site at discharge station.

DRAINAGE AREA.--5,100 mi^2 (13,209 km^2), revised.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1900 to April 1906, October 1933 to current year. Monthly discharge only for some periods, published in WSP 1307. Prior to January 1904, published as "above Minetto" or "near Minetto." January 1904 to April 1906, published as "at Battle Island." Records for April 1897 to September 1900, published in WSP 65 and for October 1927 to September 1928, published in WSP 664, have been found to be unreliable and should not be used.

REVISED RECORDS.--WSP 2112: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 246.00 ft (74.981 m) Barge Canal datum. Prior to 1933, nonrecording gage at site about 6 mi (10 km) upstream at different datum.

REMARKS.--Records good. Prior to 1933 and subsequent to 1972, flow in Oswego (Barge) Canal not included. A large amount of natural storage and some artificial regulation is afforded by the many large lakes and the Erie (Barge) and Oswego (Barge) Canal systems in the river basin. Large diurnal fluctuations at low and medium flow caused by powerplants upstream from station. Oswego River basin receives water from Erie (Barge) Canal through lock 32 near Pittsford. Water may be diverted into or received from Mohawk River basin through summit levels of Erie (Barge) Canal between New London and Utica. During part of year entire flow from 45.5 mi^2 (118 km^2) of Mud Creek drainage area may be diverted from Chemung River basin into Keuka Lake in Oswego River basin. Nearly all of flow from 14 mi^2 (36.3 km^2) of the Tioughnioga River basin may be diverted into De Ruyter Reservoir, in Oswego River basin.

COOPERATION.--Records of lockages at lock 7 furnished by New York State Department of Transportation, record of elevations of Lake Ontario by Corps of Engineers, daily discharge records for High Dam by Niagara Mohawk Power Corp.

AVERAGE DISCHARGE.--45 years (1933-1978), 6,724 ft^3/s (190.4 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 37,500 ft^3/s (1,060 m^3/s) Mar. 28, 1936, includes daily mean discharge of canals; maximum gage height, 13.46 ft (4.103 m) Apr. 10, 1940; minimum discharge (river only), 30 ft^3/s (0.85 m^3/s) Nov. 6, 1944; minimum daily, 274 ft^3/s (7.76 m^3/s) Oct. 10, 1969; minimum gage height, 0.97 ft (0.296 m) Aug. 24, 1934.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 27,000 ft^3/s (765 m^3/s) Mar. 29; maximum gage height, 11.70 ft (3.566 m) Mar. 30; minimum daily discharge, 1,060 ft^3/s (30.0 m^3/s) July 12; minimum gage height, 2.01 ft (0.613 m) Sept. 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17100	14300	15800	15400	15100	8560	26600	10200	2600	2260	2700	1190
2	17400	13800	16900	15000	15000	8340	26900	8370	2500	1980	2750	1300
3	17700	12400	17100	14000	14900	7550	26100	7620	2490	1770	3010	1280
4	18400	10500	17000	14300	14800	6560	25100	7980	2990	2020	3070	1430
5	18300	10600	16900	14000	14200	6590	25900	7870	2650	2300	3110	1380
6	18100	10600	16800	13600	13500	6610	25800	4190	2390	2100	3030	1340
7	17800	11000	15900	13400	12900	6330	25400	3810	2380	1880	2880	1390
8	17500	14500	15500	13400	12500	5530	25000	6110	2480	1780	2980	1700
9	17800	16800	15300	15400	12400	4530	24500	7440	3090	1860	2970	1470
10	18800	16800	14300	16200	12400	6980	23700	10400	4030	1380	3280	1400
11	18600	18700	14400	15500	12400	8370	23100	11200	3940	1350	3520	1360
12	18300	19200	14300	15700	12400	7770	23100	11300	4200	1060	4090	2590
13	17800	19100	14400	15600	12200	6110	22700	11200	4060	1220	3950	3220
14	17300	18700	15900	14900	12300	6660	21900	11200	4230	1550	3990	4220
15	16600	18400	19400	14700	12100	9660	21600	10800	3790	1500	3830	5240
16	16400	18200	20800	14600	11900	10500	21300	9970	3230	1200	4070	5430
17	17600	18200	21700	14500	11600	11600	20800	9010	1770	1590	4140	5470
18	20500	18300	22100	13900	11500	11900	19900	7420	1070	1390	4220	5480
19	21000	18400	21800	13600	11200	12200	19000	7060	2180	1710	2860	5780
20	20800	18500	21500	13500	11100	12400	18100	6640	1990	1660	3250	7300
21	20700	18400	21200	13000	10400	13100	17100	5880	2230	1480	3120	8380
22	20200	18200	20800	13200	10500	16800	16700	4870	3390	1690	2170	8030
23	19500	17700	20400	13300	10500	19400	16300	5190	4170	1490	2180	3860
24	18900	17200	19800	13000	9480	21400	15600	4530	4630	1720	2150	2550
25	18100	16400	19500	13100	8260	21500	15100	3630	5760	1640	2020	1940
26	17300	16200	19500	13700	8570	21300	14600	2310	5330	1560	1140	1930
27	16600	15800	18900	14400	8720	23700	13900	2020	4900	1710	1260	2100
28	16000	15600	18100	15200	8790	26500	12600	2130	5130	2560	1800	1710
29	15600	14800	17300	15200	---	27000	11200	2130	3620	2610	1870	1800
30	15100	14800	16500	15100	---	26600	10800	2530	2530	2200	2100	1620
31	14700	---	15800	15000	---	26200	---	2590	---	2520	1950	---
TOTAL	556500	482100	555600	445400	331620	408250	610400	207600	99950	54740	89460	93890
MEAN	17950	16070	17920	14370	11840	13170	20350	6697	3332	1766	2886	3130
MAX	21000	19200	22100	16200	15100	27000	26900	11300	5760	2610	4220	8380
MIN	14700	10500	14300	13000	8260	4530	10800	2020	1070	1060	1140	1190

CAL YR 1977 TOTAL 3487380 MEAN 9554 MAX 22100 MIN 1060
WTR YR 1978 TOTAL 3935510 MEAN 10780 MAX 27000 MIN 1060

04249000 OSWEGO RIVER AT LOCK 7, OSWEGO, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1957, 1964-66, 1971 to current year.
CHEMICAL DATA: 1957 (a), 1958-60 (a) unpublished, 1964 (b), 1965 (c), 1966 (a), 1971-72 (a), 1974 (a), 1975 (c), 1976-78 (d).
MINOR ELEMENTS DATA: 1971-73 (a), 1975 (b), 1976 (a), 1977-78 (b).
ORGANIC DATA: TOC--1975 (b), 1978 (c).
NUTRIENT DATA: 1971 (a), 1974 (a), 1975 (c), 1976-78 (d).
BIOLOGICAL DATA:
Coliform bacteria--1974 (a), 1975 (c), 1976-78 (d).
Phytoplankton--1974 (a), 1975 (c), 1976 (d), 1977-78 (c).
Periphyton--1975-78 (a).
SEDIMENT DATA: 1974 (a), 1975 (c), 1976 (d), 1977 (b), 1978 (c).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: September 1975 to current year.
WATER TEMPERATURES: July 1975 to current year.

INSTRUMENTATION.--Water-quality monitor since July 1975.

REMARKS.--Interruptions in the record were due to malfunctions of the instruments.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum recorded, 2,090 micromhos Sept. 24, 1978; minimum recorded, 430 micromhos Apr. 19, 1976.
WATER TEMPERATURES: Minimum, freezing point on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum recorded, 2,090 micromhos Sept. 24; minimum recorded, 610 micromhos May 15.
WATER TEMPERATURES: Minimum, freezing point on many days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	PH (UNITS)	TUR-BID-ITY (JTU)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
OCT												
13...	1000	17900	7.2	8	--	10.0	93	210	146	220	110	68
NOV												
02...	1000	13500	7.3	1	--	9.6	89	260	570	230	110	70
DEC												
12...	1000	14100	7.0	2	--	14.0	96	K950	K14800	240	110	78
JAN												
19...	1030	13700	7.2	8	--	13.2	90	K1700	5700	230	120	74
FEB												
22...	1000	10500	7.7	4	--	12.8	88	670	2600	230	110	72
MAR												
21...	1000	12700	7.2	30	--	12.2	86	540	4300	210	91	66
APR												
19...	1000	19100	7.5	4	--	11.2	93	K76	71	210	98	67
MAY												
16...	1000	9970	7.1	5	--	10.1	96	K142	118	190	48	57
JUN												
08...	0930	4970	7.3	5	--	8.2	93	59	39	310	190	100
JUL												
19...	1000	1900	7.4	--	1.0	8.0	96	K12	76	420	320	140
AUG												
24...	1000	3350	7.1	--	6.0	8.0	95	280	230	340	250	110
SEP												
19...	1000	2600	7.4	--	4.0	9.0	86	330	63	230	140	74

K Results based on colony count outside the acceptable range (non-ideal colony count).

04249000 OSWEGO RIVER AT LOCK 7, OSWEGO, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)
OCT											
13...	12	48	2.7	130	0	110	51	110	.1	2.2	395
NOV											
02...	13	48	2.7	140	0	110	51	110	.0	5.9	417
DEC											
12...	12	58	2.7	160	0	130	50	130	.1	2.0	446
JAN											
19...	12	55	2.4	140	0	110	55	130	.1	2.4	442
FEB											
22...	12	55	2.3	140	0	110	51	130	.1	2.6	450
MAR											
21...	12	44	2.7	150	0	120	51	97	.1	3.8	387
APR											
19...	11	38	1.9	140	0	110	54	96	.1	1.3	389
MAY											
16...	11	40	1.9	170	0	140	59	84	.1	.1	362
JUN											
08...	14	110	3.3	140	0	110	76	260	.2	.8	792
JUL											
19...	16	150	4.1	--	--	96	84	380	.2	.5	1090
AUG											
24...	15	110	3.1	--	--	89	82	270	.1	.6	808
SEP											
19...	11	46	2.0	--	--	89	60	130	.1	.6	439

DATE	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)
OCT											
13...	358	.45	--	--	.49	--	.94	.07	--	2	2
NOV											
02...	370	.46	.13	.48	.61	.47	1.1	.05	.03	--	--
DEC											
12...	412	.60	.25	.62	.87	.85	1.5	.05	.03	--	--
JAN											
19...	400	--	--	--	--	--	--	--	--	--	--
FEB											
22...	394	.70	.26	.58	.84	.60	1.5	.07	.02	--	--
MAR											
21...	351	.97	.31	.65	.96	.87	1.9	.08	.02	--	--
APR											
19...	338	.30	.07	.61	.68	.41	.98	.05	.01	--	--
MAY											
16...	337	.41	.09	.51	.60	--	1.0	.06	--	1	1
JUN											
08...	633	.58	.21	.67	.88	--	1.5	.08	.04	--	--
JUL											
19...	833	.36	.21	.48	.69	.40	1.1	.06	.05	0	0
AUG											
24...	644	.12	.26	.94	1.2	.68	1.3	.14	.08	--	--
SEP											
19...	377	.16	.13	.83	.96	.64	1.1	.07	.03	1	1

04249000 OSWEGO RIVER AT LOCK 7, OSWEGO, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)
OCT 13...	--	--	0	0	<10	1	0	0	3	1	490
NOV 02...	--	--	--	--	--	--	--	--	--	--	--
DEC 12...	--	--	--	--	--	--	--	--	--	--	--
JAN 19...	--	--	--	--	--	--	--	--	--	--	--
FEB 22...	--	--	--	--	--	--	--	--	--	--	--
MAR 21...	--	--	--	--	--	--	--	--	--	--	--
APR 19...	--	--	--	--	--	--	--	--	--	--	--
MAY 16...	0	0	1	0	<10	1	0	0	4	2	310
JUN 08...	--	--	--	--	--	--	--	--	--	--	--
JUL 19...	0	0	0	0	10	2	0	0	3	2	170
AUG 24...	--	--	--	--	--	--	--	--	--	--	--
SEP 19...	0	0	0	0	<10	0	1	0	4	8	170

DATE	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)
OCT 13...	40	10	4	40	0	.5	.5	0	0	--	--
NOV 02...	--	--	--	--	--	--	--	--	--	--	--
DEC 12...	--	--	--	--	--	--	--	--	--	--	--
JAN 19...	--	--	--	--	--	--	--	--	--	--	--
FEB 22...	--	--	--	--	--	--	--	--	--	--	--
MAR 21...	--	--	--	--	--	--	--	--	--	--	--
APR 19...	--	--	--	--	--	--	--	--	--	--	--
MAY 16...	20	11	1	60	10	<.5	<.5	0	0	1	0
JUN 08...	--	--	--	--	--	--	--	--	--	--	--
JUL 19...	30	0	0	50	30	.5	.5	0	0	0	0
AUG 24...	--	--	--	--	--	--	--	--	--	--	--
SEP 19...	10	3	4	50	20	<.5	<.5	0	0	0	0

04249000 OSWEGO RIVER AT LOCK 7, OSWEGO, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)
OCT					
13...	10	10	10	--	--
NOV					
02...	--	--	5.9	--	--
DEC					
12...	--	--	11	--	--
JAN					
19...	--	--	8.2	--	--
FEB					
22...	--	--	4.7	--	--
MAR					
21...	--	--	4.7	--	--
APR					
19...	--	--	6.3	--	--
MAY					
16...	20	0	--	10	1.4
JUN					
08...	--	--	7.0	--	--
JUL					
19...	30	10	--	3.5	1.2
AUG					
24...	--	--	4.6	--	--
SEP					
19...	20	0	--	4.2	1.0

DATE	TIME	SAMP-LING DEPTH (FT)	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	TEMPER-ATURE (DEG C)
OCT					
13...	0930	5.0	45	650	12.0
13...	1005	5.0	140	650	12.0
13...	1040	5.0	235	660	12.0
NOV					
02...	0945	4.0	40	730	11.0
02...	1010	4.0	140	745	11.0
02...	1045	4.0	240	730	11.0
DEC					
12...	0935	4.5	40	850	.0
12...	1015	4.2	140	865	.0
12...	1045	4.0	240	850	.0
JUN					
08...	0930	3.0	35	1200	22.0
08...	0950	3.0	140	1200	22.0
JUN					
08...	1015	3.0	245	1200	22.0
JUL					
19...	1005	1.0	40	1600	25.0
19...	1025	1.0	140	1600	25.5
19...	1110	1.0	240	1600	25.0
AUG					
24...	0935	2.0	40	1220	24.5
24...	0955	2.0	140	1240	24.0
24...	1025	2.0	240	1220	24.5
SEP					
19...	1005	1.0	40	720	17.5
19...	1020	1.0	140	710	18.0
19...	1040	1.0	240	725	17.5

SUSPENDED-SEDIMENT MEASUREMENTS, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
OCT				
13...	1000	17900	23	1110
NOV				
02...	1000	13500	633	23100
MAY				
16...	1000	9970	10	269
JUN				
08...	0930	4970	10	134
JUL				
19...	1000	1900	4	21
AUG				
24...	1000	3350	11	99
SEP				
19...	1000	2600	35	246

04249000 OSWEGO RIVER AT LOCK 7, OSWEGO, NY--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

PHYTOPLANKTON

DATE	NOV 2,77		MAR 21.78		MAY 16,78		JUN 8.78	
TIME	1000		1000		1000		0930	
TOTAL CELLS/ML	3100		3900		6400		4500	
DIVERSITY: DIVISION	1.7		0.7		1.1		1.3	
.CLASS	1.7		0.7		1.1		1.4	
..ORDER	2.0		1.3		2.1		2.1	
...FAMILY	2.3		1.4		3.0		2.9	
....GENUS	3.1		1.4		3.3		3.3	
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)								
.CHLOROPHYCEAE								
..CHLOROCOCCALES								
...COELASTRACEAE								
....COELASTRUM	--	-	--	-	--	-	420	9
...HYDRODICTYACEAE								
....PEDIASTRUM	--	-	--	-	220	3	--	-
...MICRACTINIACEAE								
....MICRACTINIUM	--	-	--	-	750	12	--	-
...OOCYSTACEAE								
....ANKISTRODESMUS	72	2	--	-	83	1	110	2
....KIRCHNERIELLA	*	0	--	-	--	-	200	4
....OOCYSTIS	72	2	--	-	--	-	200	4
....TETRAEDRON	--	-	--	-	--	-	*	0
...SCENEDESMACEAE								
....SCENEDESMUS	390	13	--	-	56	1	1200#	27
....TETRASTRUM	--	-	--	-	--	-	270	6
..TETRASPORALES								
...PALMELLACEAE								
....SPHAEROCYSTIS	--	-	--	-	610	10	--	-
..VOLVOCALES								
...CHLAMYDOMONADACEAE								
....CHLAMYDOMONAS	--	-	--	-	280	4	630	14
..CHLOROCOCCALES								
...OOCYSTACEAE								
....GLOEOACTINIUM	60	2	--	-	--	-	--	-
CHRYSOPHYTA								
.BACILLARIOPHYCEAE								
..CENTRALES								
...COSCINODISCACEAE								
....COSCINODISCUS	--	-	--	-	--	-	*	0
....CYCLOTELLA	590#	19	550	14	1100#	17	250	5
....MELOSIRA	84	3	--	-	56	1	--	-
....STEPHANODISCUS	72	2	--	-	--	-	--	-
...RHIZOSOLENIACEAE								
....RHIZOSOLENIA	--	-	--	-	140	2	--	-
..PENNALES								
...ACHNANTHACEAE								
....ACHNANTHES	--	-	--	-	56	1	--	-
....COCCONEIS	*	0	--	-	--	-	--	-
....RHOICOSPHENIA	*	0	--	-	--	-	--	-
...CYMBELLACEAE								
....CYMBELLA	--	-	--	-	*	0	--	-
...DIATOMACEAE								
....DIATOMA	--	-	--	-	--	-	*	0
...FRAGILARIACEAE								
....ASTERIONELLA	24	1	--	-	830	13	180	4
....FRAGILARIA	*	0	--	-	170	3	--	-
....SYNEDRA	36	1	--	-	56	1	--	-
...GOMPHONEMATACEAE								
....GOMPHONEMA	*	0	43	1	--	-	--	-
...NAVICULACEAE								
....GYROSIGMA	--	-	--	-	*	0	--	-
....NAVICULA	24	1	43	1	--	-	--	-
...NITZSCHIACEAE								
....NITZSCHIA	*	0	71	2	--	-	--	-
...SURIRELLACEAE								
....SURIRELLA	24	1	*	0	*	0	--	-
...TABELLARIACEAE								
....TABELLARIA	--	-	--	-	1700#	27	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)								
.CYANOPHYCEAE								
..CHROOCOCCALES								
...CHROOCOCCACEAE								
....ANACYSTIS	480#	16	--	-	--	-	360	8
..HORMOGONALES								
...NOSTOCACEAE								
....ANABAENA	36	1	--	-	--	-	--	-
...OSCILLATORIACEAE								
....OSCILLATORIA	--	-	370	9	--	-	450	10
..CHROOCOCCALES								
...CHROOCOCCACEAE								
....GOMPHOSPHAERIA	910#	30	2800#	72	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

04249000 OSWEGO RIVER AT LOCK 7, OSWEGO, NY--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

PHYTOPLANKTON

DATE	NOV 2,77		MAR 21,78		MAY 16,78		JUN 8,78	
TIME	1000		1000		1000		0930	
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
EUGLENOPHYTA (EUGLENOIDS)								
.CRYPTOPHYCEAE								
..CRYPTOMONIDALES								
...CRYPTOCHRYSIDACEAE								
....CHROOMONAS	110	4	--	-	--	-	--	-
...CRYPTOMONODACEAE								
....CRYPTOMONAS	--	-	*	0	--	-	110	2
.EUGLENOPHYCEAE								
..EUGLENALES								
...EUGLENACEAE								
....EUGLENA	*	0	--	-	170	3	45	1
....TRACHELOMONAS	*	0	--	-	56	1	--	-
PYRRHOPHYTA (FIRE ALGAE)								
.DINOPHYCEAE								
..PERIDINIALES								
...PERIDINIACEAE								
....PERIDINIUM	*	0	--	-	--	-	--	-

NOTE: * - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

PERIPHYTON

Dates of exposure	Length of exposure (days)	Biomass (g/m²) Dry weight	Biomass (g/m²) Ash weight	Chlorophyll a (mg/m²)	Chlorophyll b (mg/m²)	Sampling method
July 19 to Aug. 24	36	1.65	0.787	1.49	0.340	Polyethylene strip
Aug. 24 to Sept. 19	26	8.82	7.72	3.26	1.58	Polyethylene strip

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	715	710	712	750	735	741	765	750	756	820	795	810
2	710	695	701	750	725	737	765	750	756	815	800	806
3	730	695	711	750	725	735	815	770	805	840	795	813
4	740	725	731	825	775	786	815	790	797	865	790	823
5	740	720	732	880	835	862	800	785	793	810	780	798
6	735	730	732	865	825	841	800	775	793	825	810	811
7	725	700	713	865	840	853	825	775	797	815	805	808
8	700	690	698	845	760	793	855	820	838	810	805	806
9	700	685	695	770	695	740	855	845	848	820	785	804
10	680	655	664	745	695	718	870	845	853	915	770	835
11	750	670	712	750	740	746	845	830	837	930	895	917
12	750	630	689	840	745	789	870	840	851	900	875	886
13	665	630	648	850	810	835	860	825	849	895	870	878
14	700	670	682	815	760	784	825	795	802	910	890	897
15	725	705	713	780	755	768	815	805	812	900	885	891
16	770	735	749	765	700	733	850	810	825	890	880	883
17	790	770	784	710	700	703	885	855	875	880	860	871
18	1060	790	936	730	705	715	870	845	854	865	840	853
19	1060	935	1020	765	730	753	845	790	816	850	840	843
20	935	880	895	775	760	767	790	755	765	880	845	863
21	885	845	868	780	735	770	755	750	754	875	845	861
22	850	825	834	770	735	749	755	745	752	845	825	833
23	840	825	832	810	775	799	765	750	758	850	830	840
24	860	840	850	810	770	790	785	765	776	855	830	841
25	850	835	842	795	775	783	780	770	772	830	815	822
26	840	760	822	830	790	802	800	770	781	835	815	824
27	760	750	756	820	785	799	820	805	816	845	835	839
28	775	755	764	845	815	826	830	785	808	850	840	846
29	775	720	742	850	800	817	800	785	793	865	850	856
30	775	750	760	860	760	830	805	795	801	885	865	878
31	760	735	747	---	---	---	830	800	819	895	870	877
MONTH	1060	630	766	860	695	779	885	745	805	930	770	846

04249000 OSWEGO RIVER AT LOCK 7, OSWEGO, NY--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	875	850	861	810	775	794	725	700	712	725	685	699
2	850	810	833	840	810	831	720	660	694	700	680	692
3	805	790	795	860	840	849	750	720	742	705	670	686
4	800	775	786	885	860	873	740	680	705	675	625	645
5	805	795	800	875	860	866	685	660	673	645	630	635
6	855	805	833	870	860	866	680	650	667	720	640	666
7	855	850	851	890	865	876	705	680	692	835	695	733
8	890	850	868	910	880	894	695	645	666	885	820	845
9	900	880	889	925	900	915	705	695	700	845	775	813
10	880	840	857	930	920	926	705	685	694	850	770	815
11	845	815	825	935	920	924	685	655	674	760	655	682
12	815	800	807	1030	905	962	660	640	652	695	640	671
13	815	800	806	945	925	934	695	660	676	650	625	640
14	815	810	814	940	805	894	700	685	692	680	620	657
15	840	815	822	955	765	831	710	700	706	675	610	637
16	840	770	828	965	855	919	705	680	691	630	620	626
17	775	760	768	865	815	849	695	655	670	670	635	657
18	785	775	776	810	740	769	680	655	668	710	645	666
19	785	775	780	745	705	724	695	675	687	765	710	738
20	785	775	779	---	---	---	695	665	677	760	730	744
21	790	780	783	---	---	---	715	695	704	910	820	866
22	805	770	792	755	700	731	725	710	721	895	855	877
23	785	765	776	765	695	733	730	690	709	905	850	883
24	810	785	799	785	740	767	705	680	692	850	775	808
25	830	810	816	765	740	754	690	660	673	1010	760	861
26	835	740	792	750	740	746	665	655	661	1210	1120	1170
27	755	735	743	740	720	729	680	660	674	1200	1090	1140
28	770	755	765	735	725	730	705	670	684	1160	955	1100
29	---	---	---	740	735	736	735	705	720	1100	955	1010
30	---	---	---	745	735	740	745	695	725	1160	995	1080
31	---	---	---	745	705	727	---	---	---	1220	1160	1180
MONTH	900	735	809	1030	695	824	750	640	690	1220	610	804

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	1320	1130	1240	---	---	---	---	---	---	---	---	---
2	1260	1120	1200	---	---	---	---	---	---	---	---	---
3	1290	1210	1260	1030	885	966	---	---	---	---	---	---
4	1280	1200	1240	1110	940	1050	---	---	---	---	---	---
5	1360	1240	1270	1240	1110	1150	1450	1170	1300	---	---	---
6	1450	1270	1300	1280	1220	1250	1400	1180	1220	---	---	---
7	1440	1270	1320	1340	1280	1300	1280	1180	1230	---	---	---
8	1440	1260	1290	1360	1260	1310	---	---	---	---	---	---
9	1450	1260	1300	1370	1250	1300	---	---	---	---	---	---
10	1340	1310	1330	1390	1270	1310	---	---	---	---	---	---
11	1340	1180	1290	1420	1270	1330	---	---	---	---	---	---
12	1240	1160	1180	1460	1310	1380	---	---	---	---	---	---
13	1220	1160	1180	1480	1360	1410	---	---	---	---	---	---
14	1220	825	1110	1440	1340	1390	---	---	---	---	---	---
15	---	---	---	1440	1340	1380	---	---	---	---	---	---
16	---	---	---	1410	1360	1380	---	---	---	---	---	---
17	---	---	---	1450	1380	1410	---	---	---	---	---	---
18	---	---	---	1490	1420	1460	---	---	---	---	---	---
19	---	---	---	1620	1450	1460	---	---	---	---	---	---
20	---	---	---	---	---	---	1370	1300	1340	1990	1870	1930
21	---	---	---	---	---	---	1410	1360	1370	2060	1990	2030
22	985	920	945	---	---	---	---	---	---	2040	1970	2010
23	1020	985	1010	---	---	---	---	---	---	2060	1600	1900
24	1050	980	1020	---	---	---	---	---	---	2090	1060	1690
25	995	980	987	---	---	---	---	---	---	---	---	---
26	1000	860	955	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	1450	825	1180	1620	885	1310	1450	1170	1290	2090	1060	1910

04249000 OSWEGO RIVER AT LOCK 7, OSWEGO, NY--Continued

TEMPERATURE(DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	.5	.0	.5	3.5	3.0	3.0	10.5	9.5	10.0
2	---	---	---	.5	.5	.5	3.5	3.0	3.0	9.5	9.0	9.0
3	---	---	---	.5	.0	.5	3.0	3.0	3.0	9.5	9.0	9.5
4	---	---	---	.5	.0	.0	4.0	3.0	3.5	10.0	9.0	9.5
5	---	---	---	.5	.0	.0	4.5	4.0	4.0	10.0	9.5	10.0
6	---	---	---	.5	.0	.0	4.5	4.0	4.0	10.0	10.0	10.0
7	---	---	---	.5	.0	.0	5.0	4.5	4.5	11.0	10.0	10.5
8	---	---	---	.5	.0	.0	4.5	4.0	4.5	12.0	11.0	11.5
9	---	---	---	1.0	.0	.5	4.5	3.5	4.0	12.5	11.5	12.0
10	---	---	---	1.5	.5	.5	4.5	4.0	4.5	13.0	12.5	12.5
11	---	---	---	1.0	1.0	1.0	5.0	4.5	5.0	13.5	12.5	13.0
12	---	---	---	1.5	1.0	1.5	5.5	4.5	5.0	13.5	13.0	13.5
13	---	---	---	2.0	1.5	2.0	6.5	5.5	6.0	14.0	13.0	13.5
14	---	---	---	2.5	2.0	2.0	7.0	6.5	6.5	14.0	14.0	14.0
15	---	---	---	2.5	2.0	2.0	6.5	6.0	6.0	14.0	13.5	14.0
16	---	---	---	2.0	2.0	2.0	6.5	5.5	6.0	14.0	14.0	14.0
17	---	---	---	2.0	1.5	2.0	7.0	6.0	6.5	14.5	14.0	14.0
18	---	---	---	2.0	1.5	1.5	7.0	6.0	6.5	15.0	14.0	14.5
19	---	---	---	2.0	1.5	1.5	7.5	6.5	7.0	16.0	15.0	15.5
20	---	---	---	1.5	1.5	1.5	7.5	7.0	7.0	17.0	16.0	16.5
21	---	---	---	2.0	2.0	2.0	7.0	6.5	7.0	17.5	17.0	17.0
22	---	---	---	2.0	2.0	2.0	7.0	6.5	7.0	17.5	17.0	17.0
23	.5	.0	.0	2.5	2.0	2.0	8.0	7.0	7.5	18.5	17.0	18.0
24	.0	.0	.0	2.0	1.5	2.0	8.5	7.5	8.0	19.0	18.0	19.0
25	.0	.0	.0	1.5	1.5	1.5	9.0	8.0	8.5	20.0	19.0	19.0
26	.5	.0	.0	1.5	1.5	1.5	10.0	9.0	9.5	21.0	19.0	19.5
27	.5	.0	.0	1.5	1.5	1.5	11.0	10.0	10.5	21.0	19.5	20.5
28	.5	.0	.0	1.5	1.5	1.5	11.0	10.5	11.0	22.0	21.0	21.5
29	---	---	---	2.0	1.5	2.0	11.0	10.5	11.0	23.0	21.0	22.0
30	---	---	---	2.5	2.0	2.0	11.0	10.5	10.5	23.5	22.5	23.0
31	---	---	---	3.0	2.5	2.5	---	---	---	24.0	23.0	24.0
MONTH	.5	.0	.0	3.0	.0	1.5	11.0	3.0	6.5	24.0	9.0	15.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	24.0	23.5	24.0	---	---	---	---	---	---	---	---	---
2	24.0	23.5	23.5	---	---	---	---	---	---	---	---	---
3	24.0	23.0	23.5	24.5	23.0	23.5	---	---	---	---	---	---
4	23.5	22.5	23.0	25.0	19.0	23.0	---	---	---	---	---	---
5	23.0	21.5	22.0	25.0	22.5	24.0	25.0	22.5	24.0	---	---	---
6	23.0	20.5	22.0	26.5	23.0	24.0	25.0	23.5	24.0	---	---	---
7	22.0	21.0	21.5	26.0	22.5	24.0	24.5	23.5	24.0	---	---	---
8	23.0	21.5	22.0	25.5	23.0	24.5	---	---	---	---	---	---
9	24.0	21.0	22.0	26.5	23.0	25.0	---	---	---	---	---	---
10	22.5	21.0	21.5	27.0	20.5	24.5	---	---	---	---	---	---
11	23.0	21.0	22.0	26.5	20.0	23.0	---	---	---	---	---	---
12	24.0	22.0	22.5	27.0	20.0	24.0	---	---	---	21.5	17.5	19.5
13	22.5	20.5	21.5	26.0	24.0	24.5	---	---	---	21.0	18.5	19.5
14	21.0	19.5	20.5	26.5	24.0	25.0	---	---	---	20.0	17.5	19.0
15	---	---	---	26.5	23.0	24.5	---	---	---	20.0	18.5	19.0
16	---	---	---	26.5	23.0	25.0	---	---	---	19.0	17.0	19.0
17	---	---	---	26.5	23.0	24.5	---	---	---	18.5	18.0	18.5
18	---	---	---	26.0	23.0	24.5	---	---	---	18.0	17.5	18.0
19	---	---	---	27.0	23.5	25.5	---	---	---	17.5	17.5	17.5
20	---	---	---	---	---	---	26.0	25.0	25.0	---	---	---
21	---	---	---	---	---	---	26.0	24.0	25.0	---	---	---
22	23.0	20.5	21.5	---	---	---	---	---	---	---	---	---
23	23.0	21.5	22.0	---	---	---	---	---	---	---	---	---
24	23.5	21.0	22.0	---	---	---	---	---	---	---	---	---
25	23.0	22.0	22.5	---	---	---	---	---	---	---	---	---
26	23.0	22.5	23.0	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	24.0	19.5	22.0	27.0	19.0	24.5	26.0	22.5	24.5	21.5	17.0	19.0

04249010 LAKE ONTARIO AT OSWEGO, NY

LOCATION.--Lat 43°27'51", long 76°30'42", Oswego County, Hydrologic Unit 04150200, in southwest corner of Port of Oswego Authority building at mouth of Oswego River at Oswego.

DRAINAGE AREA.--295,800 mi² (766,100 km²).

PERIOD OF RECORD.--January 1860 to current year. Records prior to October 1960 in files of Lake Survey Center.

GAGE.--Water-stage recorder. Elevations are in feet International Great Lakes Datum (1955). Prior to Jan. 1, 1933, nonrecording gages.

COOPERATION.--Records furnished by U.S. Department of Commerce, NOAA-NOS, Lake Survey Center, Detroit, Mich.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 248.96 ft (75.883 m) June 6, 1952; minimum observed, 240.94 ft (73.438 m) Dec. 23, 1934.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 246.84 ft (75.237 m) May 21; minimum, 244.21 ft (74.435 m) Sept. 30.

ELEVATION, IN FEET ABOVE IGLD, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	245.14	244.61	244.70	245.50	245.21	245.72	245.78	246.72	246.48	246.08	245.34	244.93
2	245.20	244.62	244.86	245.74	246.11	245.70	245.87	246.65	246.47	246.00	245.31	244.89
3	245.26	244.60	244.81	245.76	246.09	245.62	245.74	246.63	246.48	245.93	245.36	244.87
4	245.23	244.68	244.82	245.56	246.08	245.75	245.79	246.55	246.42	245.92	245.38	244.83
5	245.09	244.65	244.61	245.55	246.03	245.68	245.94	246.54	246.46	245.90	245.31	244.83
6	245.19	244.58	244.91	245.51	246.10	245.62	245.86	246.57	246.38	245.87	245.31	244.82
7	245.11	244.53	244.94	245.46	246.17	245.54	246.06	246.56	246.37	245.84	245.28	244.78
8	244.91	244.65	244.73	245.45	246.07	245.47	246.15	246.47	246.41	245.83	245.27	244.75
9	245.14	244.69	244.97	246.06	246.10	245.46	246.10	246.57	246.44	245.82	245.32	244.70
10	245.19	244.73	244.95	246.11	245.07	245.44	246.05	246.61	246.36	245.87	245.35	244.55
11	245.07	244.78	244.78	246.03	245.16	245.39	246.11	246.55	246.33	245.86	245.29	244.60
12	245.15	244.84	244.69	245.84	246.19	245.39	246.20	246.55	246.30	245.82	245.27	244.63
13	245.12	244.83	244.73	245.76	246.02	245.33	246.26	246.48	246.45	245.73	245.24	244.53
14	245.11	244.73	244.85	245.88	246.02	245.32	246.34	246.55	246.43	245.73	245.19	244.42
15	245.07	244.65	244.99	245.95	245.99	245.44	246.37	246.59	246.36	245.68	245.14	244.53
16	245.16	244.67	244.98	245.97	245.96	245.39	246.34	246.64	246.27	245.69	245.18	244.56
17	245.27	244.75	244.99	245.82	245.99	245.39	246.34	246.62	246.21	245.68	245.29	244.51
18	245.01	244.94	244.96	245.93	245.97	245.40	246.32	246.64	246.23	245.62	245.23	244.54
19	245.01	244.87	245.06	245.86	245.96	245.51	246.32	246.63	246.26	245.58	245.21	244.59
20	245.05	244.66	245.02	245.83	245.89	245.33	246.50	246.61	246.23	245.56	245.31	244.54
21	245.00	244.73	245.26	245.98	245.90	245.37	246.60	246.68	246.22	245.57	245.21	244.55
22	245.01	244.80	245.34	245.98	245.95	245.48	246.60	246.63	246.22	245.56	245.16	244.57
23	244.92	244.67	245.30	245.96	245.91	245.52	246.58	246.60	246.22	245.61	245.11	244.50
24	244.87	244.84	245.29	245.86	245.87	245.57	246.60	246.60	246.19	245.55	245.09	244.53
25	244.85	244.68	245.55	245.88	245.78	245.49	246.63	246.60	246.16	245.48	245.06	244.55
26	244.86	244.97	245.60	245.98	245.81	245.48	246.63	246.58	246.10	245.48	245.02	244.45
27	244.85	244.80	245.51	246.24	245.79	245.63	246.65	246.56	246.12	245.49	244.94	244.44
28	244.85	244.78	245.52	246.20	245.71	245.64	246.67	246.53	246.14	245.55	244.87	244.52
29	244.80	244.70	245.58	246.20	---	245.72	246.68	246.52	246.12	245.52	245.02	244.40
30	244.74	244.62	245.57	246.21	---	245.70	246.71	246.50	246.13	245.47	244.96	244.30
31	244.62	---	245.57	246.18	---	245.66	---	246.52	---	245.35	244.93	---
MEAN	245.03	244.72	245.08	245.88	246.00	245.52	246.29	246.58	246.30	245.70	245.19	244.61
MAX	245.27	244.97	245.60	246.24	246.21	245.75	246.71	246.72	246.48	246.08	245.38	244.93
MIN	244.62	244.53	244.61	245.45	245.71	245.32	245.74	246.47	246.10	245.35	244.87	244.30

CAL YR 1977 MEAN 244.79 MAX 245.60 MIN 243.56
WTR YR 1978 MEAN 245.57 MAX 246.72 MIN 244.30

04250750 SANDY CREEK NEAR ADAMS, NY
(National stream-quality accounting network station)

LOCATION.--Lat 43°48'48", long 76°04'30", Jefferson County, Hydrologic Unit 04140102, on left bank 250 ft (76 m) upstream from highway bridge on Liberty Street, 0.2 mi (0.3 km) downstream from tributary, 2.5 mi (4.0 km) downstream from Adams, and 10.0 mi (16.1 km) upstream from mouth. Water-quality sampling site at discharge station; except for specific conductance and water temperatures which are measured about 2 mi (3.2 km) downstream, in the village of Belleville.

DRAINAGE AREA.--128 mi² (332 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1957 to current year.

GAGE.--Water-stage recorder. Datum of gage is 523.71 ft (159.627 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are poor. Moderate diurnal fluctuation at low flow caused by mills above station.

AVERAGE DISCHARGE.--21 years, 269 ft³/s (7.618 m³/s), 28.54 in/yr (725 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,800 ft³/s (334 m³/s) Apr. 4, 1963, gage height, 11.01 ft (3.356 m), from rating curve extended above 5,500 ft³/s (156 m³/s) on basis of slope-area measurement of peak flow; minimum, 1.5 ft³/s (0.042 m³/s) Sept. 17, 18, 1963, Aug. 19, 1964; minimum daily, 2.2 ft³/s (0.062 m³/s) Sept. 7, 11, 1960, Sept. 17, 1963, Aug. 16, Sept. 22, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,000 ft³/s (85 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 1	2400	*4,060	115	*7.57	2.307	Apr. 1	2130	3,040	86	6.31	1.923
Dec. 14	2230	3,360	95	6.67	2.033	Apr. 11	2200	3,710	105	7.06	2.152
Jan. 9	0800	3,970	112	7.35	2.240						

Minimum discharge, 2.7 ft³/s (0.076 m³/s) Aug. 15, gage height, 0.81 ft (0.247 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1250	120	1980	180	505	100	1850	259	42	28	7.9	7.1
2	1940	114	1450	170	426	100	2350	230	40	22	6.7	6.3
3	1210	110	826	170	372	98	1450	205	38	20	6.3	6.3
4	939	495	615	180	328	96	1160	191	35	18	6.3	6.3
5	572	556	457	190	302	94	2640	181	35	16	5.9	5.9
6	434	304	396	210	260	92	1830	185	43	15	5.3	5.6
7	339	253	320	230	240	92	1790	237	36	13	4.9	4.4
8	279	772	290	282	230	90	1460	222	55	12	4.7	3.8
9	770	690	260	2670	220	90	988	421	55	12	5.6	3.8
10	815	520	240	1830	210	88	877	527	42	14	5.9	3.5
11	466	1790	230	1360	200	88	1750	290	33	13	5.9	27
12	401	988	240	1050	190	89	2720	212	28	12	4.9	426
13	336	696	311	813	180	91	2520	185	169	11	4.7	175
14	278	520	871	550	170	143	1880	152	276	12	4.7	74
15	253	456	1750	446	160	505	1000	141	112	10	4.4	43
16	308	751	1150	340	150	586	788	143	66	8.7	5.9	34
17	1130	1130	838	290	150	505	851	169	47	8.3	5.6	31
18	954	1310	626	260	140	426	864	157	37	9.2	5.3	25
19	531	1220	511	230	140	354	877	163	42	9.7	5.6	47
20	401	808	441	210	130	298	1070	133	76	8.7	11	48
21	328	1090	411	190	130	467	1140	201	58	7.5	15	32
22	293	1140	370	170	120	1300	758	191	50	7.5	11	30
23	271	632	350	160	120	1290	687	128	40	7.5	7.5	27
24	233	779	320	150	120	1070	676	103	36	5.9	7.1	22
25	207	582	290	219	110	813	665	89	30	5.9	9.7	18
26	195	537	270	665	110	659	637	79	25	4.9	10	15
27	178	447	240	1230	110	1180	568	72	24	4.7	8.3	13
28	164	392	230	1040	110	1390	478	66	23	5.6	7.5	13
29	151	361	210	845	---	1160	411	56	46	6.3	9.2	15
30	139	348	200	716	---	963	337	51	33	7.5	9.7	15
31	132	---	190	621	---	851	---	46	---	9.7	7.9	---
TOTAL	15897	19911	16883	17667	5633	15168	37072	5485	1674	345.6	220.4	1183.0
MEAN	513	664	545	570	201	489	1236	177	55.8	11.1	7.11	39.4
MAX	1940	1790	1980	2670	505	1390	2720	527	278	28	15	426
MIN	132	110	190	150	110	88	337	46	23	4.7	4.4	3.5
CFSM	4.01	5.19	4.26	4.45	1.57	3.82	9.66	1.38	.44	.09	.06	.31
IN.	4.62	5.79	4.91	5.13	1.64	4.41	10.77	1.59	.49	.10	.06	.34

CAL YR 1977 TOTAL 153418.2 MEAN 420 MAX 7190 MIN 6.8 CFSM 3.28 IN 44.59
WTR YR 1978 TOTAL 137139.0 MEAN 376 MAX 2720 MIN 3.5 CFSM 2.94 IN 39.86

04250750 SANDY CREEK NEAR ADAMS, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1965 and current year.
CHEMICAL DATA: 1965 (c), 1978 (c).
MINOR ELEMENTS DATA: 1978 (b).
ORGANIC DATA: TOC--1978 (b).
NUTRIENT DATA: 1978 (c).
BIOLOGICAL DATA:
Coliform bacteria--1978 (c).
Phytoplankton--1978 (c).
Periphyton--1978 (b).
SEDIMENT DATA: 1978 (c).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: January to September 1978.
WATER TEMPERATURES: January to September 1978.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum daily, 590 micromhos Sept. 19; minimum daily, 150 micromhos Apr. 13.
WATER TEMPERATURES: Maximum daily, 32.0°C June 27; minimum daily, freezing point on many days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	PH (UNITS)	TUR-BID-ITY (JTU)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
JAN												
24...	1230	246	7.6	2	--	11.8	83	K1500	400	140	21	52
FEB												
21...	1130	153	7.7	1	--	14.0	97	217	660	150	19	54
MAR												
21...	1100	310	7.8	8	--	10.4	76	K2120	1733	130	18	48
APR												
12...	1215	2600	7.5	75	--	10.6	85	420	390	69	10	25
MAY												
23...	1400	122	8.2	2	--	10.0	106	210	K17	120	18	41
JUN												
26...	1245	25	7.6	--	1.0	7.0	78	K44900	9300	160	17	56
JUL												
24...	1300	4.7	7.7	--	2.0	7.2	86	46000	K500	190	6	66
AUG												
15...	1230	4.1	7.5	--	3.0	6.5	80	--	2500	180	6	62
SEP												
11...	1530	8.8	7.3	--	1.0	5.8	61	36000	K1500	180	7	63

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)
JAN											
24...	3.4	4.0	1.2	150	0	120	14	6.2	.1	4.7	162
FEB											
21...	3.8	4.1	1.3	160	0	130	15	5.7	.1	4.6	176
MAR											
21...	3.2	4.1	1.4	140	0	110	13	5.4	.1	4.4	137
APR											
12...	1.6	2.0	1.2	72	0	59	7.6	2.6	.0	2.4	89
MAY											
23...	3.3	3.9	1.4	120	0	98	13	6.6	.0	1.2	134
JUN											
26...	4.2	9.3	2.2	--	--	140	14	10	.1	2.8	193
JUL											
24...	5.2	19	2.6	--	--	180	17	20	.1	4.0	261
AUG											
15...	5.2	18	3.1	--	--	170	14	20	.1	4.5	245
SEP											
11...	4.8	21	2.4	--	--	170	21	23	.1	4.5	249

K Results based on colony count outside the acceptable range (non-ideal colony count).

04250750 SANDY CREEK NEAR ADAMS, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)
JAN 24...	160	1.1	--	--	.10	--	1.2	.02	--	--	--
FEB 21...	168	.66	.01	.39	.40	.29	1.1	.03	.01	0	0
MAR 21...	149	.90	.01	.39	.40	.20	1.3	.06	.02	--	--
APR 12...	78	.75	.01	.47	.48	.15	1.2	.10	.01	1	0
MAY 23...	130	.23	.02	.44	.46	.48	.69	.12	.10	--	--
JUN 26...	183	.00	.13	.27	.40	.34	.40	.47	.41	2	1
JUL 24...	242	.01	.28	1.8	2.1	1.1	2.1	2.2	2.0	1	1
AUG 15...	229	.01	.36	1.6	2.0	.56	2.0	2.5	2.1	--	--
SEP 11...	242	.03	.01	.65	.66	.59	.69	1.6	1.7	--	--

DATE	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)
JAN 24...	--	--	--	--	--	--	--	--	--	--	--
FEB 21...	0	0	0	1	<10	1	0	0	4	1	160
MAR 21...	--	--	--	--	--	--	--	--	--	--	--
APR 12...	0	0	0	0	<10	2	0	0	18	3	6900
MAY 23...	--	--	--	--	--	--	--	--	--	--	--
JUN 26...	0	0	1	0	<10	0	0	0	3	1	210
JUL 24...	0	0	1	1	60	0	4	0	4	2	1200
AUG 15...	--	--	--	--	--	--	--	--	--	--	--
SEP 11...	--	--	--	--	--	--	--	--	--	--	--

DATE	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)
JAN 24...	--	--	--	--	--	--	--	--	--	--	--
FEB 21...	90	5	1	20	10	<.5	<.5	0	0	1	0
MAR 21...	--	--	--	--	--	--	--	--	--	--	--
APR 12...	50	4	0	140	10	<.5	<.5	0	0	0	0
MAY 23...	--	--	--	--	--	--	--	--	--	--	--
JUN 26...	30	17	2	100	10	<.5	<.5	0	0	0	0
JUL 24...	70	6	4	150	110	<.5	<.5	0	0	0	0
AUG 15...	--	--	--	--	--	--	--	--	--	--	--
SEP 11...	--	--	--	--	--	--	--	--	--	--	--

04250750 SANDY CREEK NEAR ADAMS, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)
JAN 24...	--	--	3.8	--	--
FEB 21...	20	10	--	10	6.0
MAR 21...	--	--	3.7	--	--
APR 12...	20	10	--	3.5	1.2
MAY 23...	--	--	8.5	--	--
JUN 26...	10	20	--	5.8	--
JUL 24...	40	10	--	6.5	.3
AUG 15...	--	--	6.6	--	--
SEP 11...	--	--	3.7	--	--

SUSPENDED-SEDIMENT MEASUREMENTS, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
FEB 21...	1130	153	6	2.5
MAR 21...	1100	310	17	14
APR 12...	1215	2600	160	1120
MAY 23...	1400	122	4	1.3
JUN 26...	1245	25	14	.97
JUL 24...	1300	4.7	22	.28
AUG 15...	1230	4.1	4	.04
SEP 11...	1530	8.8	2	.05

04250750 SANDY CREEK NEAR ADAMS, NY--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

PHYTOPLANKTON

DATE	MAR 21,78	MAY 23,78
TIME	1100	1400
TOTAL CELLS/ML	220	1100
DIVERSITY: DIVISION	1.2	0.9
.CLASS	1.2	0.9
..ORDER	1.6	1.0
...FAMILY	1.7	1.7
....GENUS	1.7	1.8

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)				
.CHLOROPHYCEAE				
..VOLVOCALES				
...CHLAMYDOMONADACEAE				
....CHLAMYDOMONAS	14	6	--	-
CHRYSOPHYTA				
.BACILLARIOPHYCEAE				
..CENTRALES				
...COSCINODISCACEAE				
....CYCLOTELLA	--	-	9	1
....MELOSIRA	54#	25	--	-
..PENNALES				
...CYMBELLACEAE				
....CYMBELLA	14	6	140	13
...DIATOMACEAE				
....DIATOMA	--	-	100	9
...FRAGILARIACEAE				
....SYNEDRA	--	-	18	2
...NAVICULACEAE				
....NAVICULA	--	-	46	4
...NITZSCHIACEAE				
....NITZSCHIA	14	6	64	6
CYANOPHYTA (BLUE-GREEN ALGAE)				
.CYANOPHYCEAE				
..CHROOCOCCALES				
...CHROOCOCCACEAE				
....ANACYSTIS	--	-	680#	63
..HORMOGONALES				
...OSCILLATORIACEAE				
....LYNGBYA	120#	56	--	-
..CHROOCOCCALES				
...CHROOCOCCACEAE				
....GOMPHOSPHAERIA	--	-	27	3

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

PERIPHYTON

Dates of exposure	Length of exposure (days)	Biomass (g/m^2)		Chlorophyll a (mg/m^2)	Chlorophyll b (mg/m^2)	Sampling method
		Dry weight	Ash weight			
May 23 to June 26	34	5.12	2.05	11.7	9.09	Polyethylene strip
June 26 to July 24	28	6.06	3.46	72.7	12.2	Polyethylene strip
July 24 to Aug. 24	31	2.52	1.42	21.9	6.62	Polyethylene strip
Aug. 24 to Sept. 27	34	38.4	31.4	42.1	25.0	Polyethylene strip

04250750 SANDY CREEK NEAR ADAMS, NY--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
(ONCE DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1				---	265	480	190	230	350	330	400	410
2				---	280	500	180	240	350	330	390	400
3				---	290	480	210	250	330	320	390	400
4				---	300	470	240	250	340	330	500	400
5				---	300	490	220	250	350	380	420	410
6				---	290	500	200	250	350	370	540	420
7				---	300	490	180	260	330	380	360	420
8				---	290	480	200	220	340	390	380	410
9				---	300	490	220	240	290	370	380	400
10				---	300	480	230	180	310	420	400	400
11				---	300	490	190	240	340	420	420	410
12				---	310	480	160	230	340	400	420	260
13				---	310	480	150	340	220	400	540	340
14				---	310	460	160	260	170	390	520	330
15				---	310	330	210	290	230	390	430	360
16				---	320	350	200	270	270	380	430	360
17				---	320	360	190	250	270	380	370	370
18				---	320	400	180	240	280	380	370	380
19				---	320	430	160	240	320	---	440	590
20				---	320	420	180	250	280	---	350	350
21				---	330	430	190	260	---	---	350	340
22				---	500	380	210	230	---	---	320	380
23				---	470	330	190	250	---	---	380	360
24				310	480	320	170	250	---	460	400	370
25				300	460	290	160	280	---	460	400	430
26				290	480	270	160	280	340	440	430	410
27				160	460	220	160	280	350	440	390	400
28				200	480	210	170	300	310	440	390	450
29				235	---	230	170	330	310	460	420	380
30				245	---	250	180	330	320	420	420	380
31				250	---	260	---	340	---	430	410	---
MEAN				249	347	395	187	262	308	397	412	391

WTR YR 1978 MEAN 334 MAX 590 MIN 150

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
(ONCE DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1				---	.0	1.0	4.0	7.0	22.0	26.0	27.0	22.0
2				---	.0	.0	2.0	8.0	24.5	24.0	29.0	23.0
3				---	.0	.5	1.5	9.5	22.0	26.0	25.0	22.0
4				---	.0	.5	3.0	10.0	22.0	27.0	25.0	26.0
5				---	.0	.5	3.0	10.5	17.0	28.0	28.0	26.0
6				---	.0	.0	3.0	9.0	19.0	30.0	29.0	25.0
7				---	.0	.5	3.5	11.0	21.0	30.0	25.0	22.0
8				---	.0	.0	3.0	14.5	21.0	29.0	24.0	20.0
9				---	.0	1.0	5.0	13.0	23.0	30.0	24.0	21.0
10				---	.0	1.0	4.0	11.5	21.0	24.0	28.0	18.0
11				---	.0	1.0	6.0	12.0	23.0	25.0	30.0	16.0
12				---	.0	1.0	6.0	13.0	24.5	28.0	25.0	17.0
13				---	.0	2.5	7.0	11.0	12.0	30.0	25.0	17.0
14				---	.0	2.5	5.5	14.0	16.0	31.0	27.0	17.0
15				---	.0	1.5	7.0	14.0	18.5	31.0	29.0	18.0
16				---	.0	1.0	7.0	15.0	20.0	27.0	26.0	20.0
17				---	.0	1.5	9.0	15.0	22.5	26.0	24.0	17.0
18				---	.0	2.0	10.0	17.0	26.0	29.0	29.0	16.0
19				---	.0	1.0	6.0	20.0	19.0	---	28.0	17.0
20				---	.0	3.5	6.0	21.0	21.0	---	28.0	22.0
21				---	.0	3.0	6.0	19.5	22.0	---	27.0	26.0
22				---	.0	3.0	9.0	16.5	21.0	---	26.0	19.0
23				---	.0	2.5	10.0	22.0	19.0	---	30.0	20.0
24				.0	.0	2.5	10.0	24.0	24.0	24.0	26.0	21.0
25				1.0	1.0	2.0	11.5	24.0	23.0	25.0	26.0	20.0
26				1.0	1.0	3.0	11.0	26.0	30.0	22.0	27.0	20.0
27				.0	1.0	2.5	10.5	28.0	32.0	21.0	26.0	21.0
28				.0	1.0	3.0	13.0	26.0	30.0	21.0	28.0	22.0
29				.0	---	4.0	11.0	25.0	25.5	19.0	21.0	22.0
30				.0	---	6.0	8.0	25.0	25.0	23.0	22.0	21.0
31				.0	---	5.0	---	27.5	---	24.0	22.0	---
MEAN				.5	.0	2.0	6.5	17.0	22.0	26.0	26.5	20.5

WTR YR 1978 MEAN 14.5 MAX 32.0 MIN .0

04252000 BLACK RIVER CANAL (FLOWING SOUTH) NEAR BOONVILLE, NY

LOCATION.--Lat 43°27'21", long 75°19'27", Oneida County, Hydrologic Unit 04150101, on left bank at former lock 69, 200 ft (61 m) downstream from bridge on State Highway 46, and 2.0 mi (3.2 km) south of Boonville.

PERIOD OF RECORD.--September 1915 to current year (canal seasons only prior to October 1942 and since October 1957).

REVISED RECORDS.--WRD NY 1974: 1973.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,105.56 ft (336.975 m) National Geodetic Vertical Datum of 1929. Prior to June 7, 1929, station was operated as a slope station on summit level of canal. Auxiliary water-stage recorder with concrete control on right bank of Lansing Kill spillway, 100 ft (30 m) downstream from spillway and headgate, 600 ft (183 m) upstream from lock 70, and 0.3 mi (0.5 km) upstream from lock 69.

REMARKS.--Records poor. This record shows combined flow in Black River Canal and Lansing Kill spillway, and represents total diversion from Black River at Forestport, through Forestport feeder, into Mohawk River basin. Discharge during periods when no water was diverted, made up of leakage through headgates and runoff from area draining into canal above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge recorded, 323 ft³/s (9.15 m³/s) Nov. 1915; practically no flow at times when no water is being diverted.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	.57					---	.84	.64	19	3.0	2.5
2	55	.52					---	.80	.89	10	3.0	2.4
3	44	.52					---	.80	.93	6.0	3.1	2.2
4	33	.65					---	.80	.84	4.0	3.5	2.2
5	20	.80					---	.88	.71	2.2	2.9	2.1
6	2.2	.71					---	.92	.93	2.5	2.8	2.0
7	1.3	.77					---	.92	1.9	1.7	2.7	2.0
8	1.3	.97					---	.97	2.0	2.8	2.5	1.8
9	18	.97					---	1.2	2.2	3.0	2.5	1.8
10	11	.80					---	1.1	2.1	2.6	2.6	1.8
11	1.6	1.1					---	.97	1.9	20	2.5	8.0
12	.89	.72					---	.89	9.8	7.5	2.5	62
13	.80	.63					3.2	.89	19	11	2.7	35
14	.71	.57					1.1	.89	19	6.3	2.8	19
15	.75	.55					.84	.79	31	4.8	3.0	4.0
16	.75	.57					.89	.88	36	4.1	3.0	2.7
17	1.0	.68					.76	.88	13	4.0	3.0	2.0
18	.84	.77					.58	.87	9.8	3.6	3.2	1.6
19	.67	.80					.49	.84	9.8	3.4	4.4	1.9
20	.67	.74					.84	.84	9.8	3.1	13	2.0
21	.67	.86					.84	.88	31	3.3	5.8	1.7
22	.63	.91					.84	.72	30	3.3	3.6	1.6
23	.67	.63					.84	.59	17	3.6	2.9	1.4
24	.63	.91					.84	.61	7.1	3.6	3.2	1.4
25	.59	.68					.88	.64	6.8	3.3	3.9	1.4
26	.64	.63					.88	.72	5.0	3.0	4.2	1.4
27	.61	.63					.80	.76	18	3.4	3.5	1.4
28	.55	.60					.80	.71	17	5.0	3.1	1.4
29	.49	---					.84	.76	17	4.7	3.1	1.4
30	.47	---					.88	.76	19	3.6	3.3	1.3
31	.44	---					---	.68	---	3.1	3.1	---
TOTAL	235.87	---	---	---	---	---	---	25.80	340.14	161.5	108.4	173.4
MEAN	7.61	---	---	---	---	---	---	.83	11.3	5.21	3.50	5.78
MAX	55	---	---	---	---	---	---	1.2	36	20	13	62
MIN	.44	---	---	---	---	---	---	.59	.64	1.7	2.5	1.3

04252500 BLACK RIVER NEAR BOONVILLE, NY

LOCATION.--Lat 43°30'42", long 75°18'25", Oneida County, Hydrologic Unit 04150101, on left bank at downstream side of bridge on Moose River Road, 0.8 mi (1.3 km) upstream from Sugar River, and 2 mi (3 km) northeast of Boonville.

DRAINAGE AREA.--295 mi² (764 km²).

PERIOD OF RECORD.--January 1911 to current year.

REVISED RECORDS.--WSP 759: Drainage area. WSP 784: 1934. WSP 1084: 1912(M), 1913, 1917-1919(M), 1922(M), 1924(M), 1926(M), 1928(M), 1930(M), 1933(M). WSP 1307: 1914(M).

GAGE.--Water-stage recorder. Datum of gage is 935.50 ft (285.140 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 27, 1933, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods, which are fair. Occasional regulation by several headwater reservoirs. Forestport feeder diverts water from State Pond at Forestport 9 mi (14 km) upstream. That portion of diverted water which does not pass Black River Canal (flowing south), see station 04252000, returns to Black River below station through Mill Creek sluiceway. Slight diurnal fluctuation at medium and low flow caused by mill above station.

AVERAGE DISCHARGE.--67 years, 699 ft³/s (19.80 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,400 ft³/s (351 m³/s) Mar. 28, 1913, gage height, about 12.5 ft (3.81 m), from floodmarks; minimum observed, about 5 ft³/s (0.14 m³/s) Aug. 26, 1918, gage height, 2.40 ft (0.732 m); minimum daily, 7 ft³/s (0.20 m³/s) Aug. 26, 1918.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,900 ft³/s (110 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Mar. 23	0030	ice jam		*9.17	2.795	Apr. 14	0830	*4,020	114	8.41	2.563

Minimum discharge, 122 ft³/s (3.46 m³/s) Sept. 9, gage height, 3.81 ft (1.161 m); minimum daily, 133 ft³/s (3.77 m³/s) Sept. 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1390	452	1410	640	640	360	1090	2070	406	251	265	179
2	3030	439	2480	600	600	340	1400	1620	394	231	244	164
3	3120	432	2030	580	600	340	1300	1350	510	221	283	153
4	2120	550	1470	560	540	350	1140	1240	492	208	804	153
5	1420	1000	1100	600	500	360	1390	1230	432	195	637	147
6	976	1030	1000	600	500	380	1600	1250	440	195	470	147
7	837	911	900	600	540	370	1550	1260	457	192	475	153
8	735	1150	800	700	540	340	1520	1210	582	188	350	158
9	1340	1390	700	1500	560	340	1270	2080	719	211	265	133
10	3240	1200	600	2400	560	340	1190	3430	666	221	440	144
11	2590	1830	560	2300	540	370	1290	2570	506	192	398	419
12	1610	1790	560	2100	540	370	2460	1740	411	170	297	2580
13	1220	1360	700	1800	500	390	3180	1430	402	182	268	2380
14	985	1100	1000	1500	480	400	3820	1150	497	173	238	909
15	1000	903	1600	1200	480	700	2810	961	488	176	214	533
16	1110	747	1900	900	470	760	2030	884	386	173	195	515
17	1740	843	1400	700	490	680	1880	834	354	170	198	419
18	2520	1090	1200	720	470	540	1830	841	374	170	201	362
19	1940	1260	1000	700	460	540	2270	897	707	161	176	615
20	1450	1120	940	700	430	540	2740	834	582	176	155	632
21	1180	1070	860	680	410	640	2910	916	492	185	248	466
22	1000	1540	780	680	410	900	2470	1040	1210	164	224	419
23	937	1410	700	680	410	2000	2200	871	909	179	192	362
24	758	1450	660	600	420	1200	2330	761	543	176	185	374
25	649	1530	800	580	440	900	2610	683	411	167	241	350
26	609	1390	700	900	390	760	2850	609	346	161	244	327
27	576	1240	660	1500	380	900	2940	506	301	204	221	290
28	545	1100	640	1400	380	1600	2930	453	312	492	204	268
29	524	1000	600	1300	---	1500	2830	419	297	470	208	268
30	496	915	640	900	---	1250	2550	419	272	358	204	265
31	474	---	680	780	---	1040	---	423	---	308	195	---
TOTAL	42121	33242	31070	31400	13680	21500	64380	35981	14898	6720	8939	14284
MEAN	1359	1108	1002	1013	489	694	2146	1161	497	217	288	476
MAX	3240	1830	2480	2400	640	2000	3820	3430	1210	492	804	2580
MIN	474	432	560	560	380	340	1090	419	272	161	155	133

CAL YR 1977 TOTAL 356616 MEAN 977 MAX 8760 MIN 178
WTR YR 1978 TOTAL 318215 MEAN 872 MAX 3820 MIN 133

04254375 PANTHER LAKE OUTLET NEAR OLD FORGE, NY

LOCATION.--Lat 43°41'05", long 74°55'08", Herkimer County, Hydrologic Unit 04150101, on left bank, 0.1 mi (0.2 km) upstream from Little Moose Lake, 0.2 mi (0.3 km) downstream from outlet of Panther Lake, and about 3.2 mi (5.2 km) southeast of Old Forge. Water quality sampling site at discharge station.

DRAINAGE AREA.--0.48 mi² (1.24 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1977 to September 1978.

GAGE.--Water-stage recorder. Altitude of gage is 1,820 ft (555 m), from topographic map.

REMARKS.--Records good except those below 0.4 ft³/s (0.011 m³/s), which are fair.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4.9 ft³/s (0.14 m³/s) May 9, 10, gage height, 1.93 ft (0.588 m); maximum gage height, 3.32 ft (1.012 m), ice jam; minimum discharge, 0.13 ft³/s (0.004 m³/s) July 12-14, 15, 18, 26, 27, gage height, 1.01 ft (0.308 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.3	.85	2.3	1.1	1.8	.60	1.6	3.7	.68	.38	.28	.28
2	3.4	.76	2.7	1.1	1.7	.57	1.9	3.3	.72	.35	.28	.26
3	3.3	.72	2.6	1.0	1.6	.57	1.8	2.9	.86	.33	.68	.24
4	2.3	.94	2.3	1.0	1.4	.60	1.7	2.7	.72	.31	.90	.24
5	2.0	1.2	2.1	.99	1.4	.60	2.0	2.7	.64	.28	.72	.24
6	2.0	1.1	2.4	.98	1.4	.68	2.0	2.7	.64	.26	.60	.22
7	1.8	1.0	2.2	.94	1.4	.72	2.0	2.7	.60	.24	.53	.20
8	1.5	.99	1.9	1.1	1.5	.60	2.0	2.9	.64	.24	.50	.17
9	2.2	1.0	1.9	4.1	1.4	.72	1.9	4.3	.72	.22	.50	.17
10	2.7	1.1	1.9	4.3	1.2	.57	1.7	4.8	.68	.19	.47	.14
11	2.6	1.8	1.7	3.8	1.2	.53	1.8	4.4	.64	.15	.41	.81
12	2.4	1.6	1.5	3.5	1.2	.50	2.3	3.9	.57	.15	.47	2.2
13	2.0	1.5	1.4	3.0	1.2	.50	2.7	3.4	.95	.13	.44	2.1
14	1.8	1.3	2.1	2.8	1.2	.68	3.2	3.0	.90	.14	.38	1.5
15	1.6	1.2	2.9	2.5	1.1	.86	3.1	2.6	.77	.14	.35	1.2
16	1.5	1.1	2.7	2.1	.90	.86	2.9	2.4	.72	.15	.33	1.1
17	2.1	1.2	2.4	1.9	.81	.86	2.6	2.2	.72	.19	.38	.95
18	2.6	1.9	2.0	2.1	.77	.77	2.4	2.0	.72	.15	.38	.81
19	2.3	2.5	1.8	1.8	.72	.68	2.4	1.9	.66	.15	.33	.90
20	2.1	2.1	1.6	2.2	.68	.64	2.6	1.6	.64	.15	.50	.77
21	1.7	2.1	1.7	2.4	.68	.77	2.8	1.9	.57	.17	.41	.72
22	1.5	2.4	1.7	2.1	.64	1.0	2.8	1.8	.64	.17	.35	.72
23	1.5	2.4	1.5	2.0	.64	1.1	2.8	1.6	.53	.17	.33	.64
24	1.3	2.6	1.4	1.8	.68	1.1	2.8	1.5	.50	.15	.38	.60
25	1.2	2.4	1.9	1.8	.77	1.0	3.2	1.2	.47	.14	.47	.53
26	1.2	2.7	1.9	2.2	.72	1.0	3.6	1.1	.47	.14	.41	.50
27	1.0	2.7	1.7	2.5	.68	1.7	4.0	1.0	.50	.24	.35	.44
28	.99	2.4	1.5	2.4	.64	1.9	4.4	.86	.47	.28	.35	.44
29	.94	2.1	1.4	2.2	---	1.8	4.5	.86	.44	.31	.35	.41
30	.90	1.8	1.3	2.1	---	1.6	4.2	.86	.41	.35	.33	.35
31	.90	---	1.2	1.9	---	1.5	---	.77	---	.31	.31	---
TOTAL	58.63	49.46	59.6	65.71	30.03	27.58	79.7	73.55	19.21	6.73	13.47	19.85
MEAN	1.89	1.65	1.92	2.12	1.07	.89	2.66	2.37	.64	.22	.43	.66
MAX	3.4	2.7	2.9	4.3	1.8	1.9	4.5	4.8	.95	.38	.90	2.2
MIN	.90	.72	1.2	.94	.64	.50	1.6	.77	.41	.13	.28	.14
CFSM	3.94	3.44	4.00	4.42	2.23	1.85	5.54	4.94	1.33	.46	.90	1.38
IN.	4.53	3.83	4.61	5.08	2.32	2.13	6.16	5.69	1.49	.52	1.04	1.54

WTR YR 1978 TOTAL 503.52 MEAN 1.38 MAX 4.8 MIN .13 CFSM 2.88 IN 36.94

04254375 PANTHER LAKE OUTLET NEAR OLD FORGE, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1977 to August 1978.
MINOR ELEMENTS DATA: 1978 (e).

REMARKS.--Some samples were collected by an automatic pumping sampler.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	SOLIDS, VOLA-TILE, SUS-PENDED (MG/L)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)
NOV											
01...	1500	.78	45	5.3	9.0	--	--	130	6	10	10
30...	1430	1.7	38	5.8	2.0	--	--	170	2	20	10
JAN											
25...	1600	1.6	32	5.7	.0	0	--	100	0	20	10
FEB											
16...	1200	.96	33	5.2	.0	0	--	80	0	20	10
MAR											
07...	1230	1.0	36	5.7	.0	--	--	100	21	20	10
22...	1700	1.1	35	6.4	.5	--	--	90	1	20	10
MAY											
02...	1730	3.2	36	6.5	5.0	--	--	110	4	30	10
03...	1230	2.9	37	6.4	--	--	--	100	4	30	20
03...	1800	4.3	--	--	--	--	--	200	15	40	40
04...	1800	2.8	--	--	--	--	--	620	87	40	90
05...	1800	3.8	--	--	--	--	--	250	42	40	50
06...	1800	3.3	--	--	--	--	--	150	44	40	20
07...	1800	2.8	--	--	--	--	--	230	60	30	30
08...	0600	2.8	--	--	--	--	--	170	32	30	30
08...	1800	3.1	--	--	--	--	--	280	32	20	30
09...	0600	4.0	--	--	--	--	--	380	33	50	30
09...	1800	4.9	--	--	--	--	--	620	25	90	30
10...	0600	4.9	--	--	--	--	--	980	44	--	50
10...	1800	4.8	--	--	--	--	--	510	22	70	30
11...	0815	4.5	34	5.7	--	--	--	240	2	20	10
11...	1800	4.4	--	--	--	--	--	500	22	90	30
12...	1800	3.8	--	--	--	--	--	380	30	40	30
13...	1800	3.3	--	--	--	--	--	320	21	30	40
14...	1800	3.0	--	--	--	--	--	280	18	30	40
15...	1800	2.6	--	--	--	--	--	280	14	40	20
24...	1430	1.4	34	6.8	20.0	--	--	130	3	20	20
JUN											
29...	1545	.20	35	7.3	24.0	--	--	110	27	20	0
JUL											
25...	1100	.17	35	7.0	--	--	--	120	14	40	30
27...	1700	.41	40	4.7	--	19	12	1100	20	90	30
27...	1900	.41	98	4.4	--	--	--	1000	42	80	50
28...	0300	.35	53	5.1	--	--	--	430	19	50	20
28...	1100	.33	46	6.6	--	0	0	420	20	50	20
29...	1500	.28	45	6.9	--	--	--	380	20	30	20
29...	1900	.47	210	3.5	--	0	0	480	20	60	20
30...	0300	.41	175	3.6	--	0	0	420	21	40	20
30...	1100	.41	146	3.7	--	--	--	440	18	30	10
31...	1100	.35	--	--	--	7	2	700	34	40	70
AUG											
01...	1100	.33	158	3.8	--	10	8	620	7	40	--
02...	1830	.33	110	4.3	--	5	1	350	40	40	40
17...	1445	.41	37	7.0	--	--	--	180	26	40	10
29...	1000	.33	37	7.0	19.0	3	2	110	--	20	60
SEP											
11...	1630	2.4	45	5.2	--	2	1	1200	26	130	100
11...	2130	1.9	51	4.8	--	0	0	700	30	80	60
12...	0330	2.3	40	5.4	--	0	0	440	38	50	100
12...	2130	2.3	38	6.1	--	0	0	370	33	20	80
13...	0930	1.6	41	6.0	--	0	0	600	16	60	180
13...	1530	2.0	54	5.7	--	0	0	450	10	40	--
15...	1000	1.2	30	6.0	14.0	1	0	140	10	30	0
16...	1200	1.2	38	6.3	--	0	0	320	--	50	90
20...	1030	2.1	39	6.1	15.0	2	0	110	2	10	20

04254375 PANTHER LAKE OUTLET NEAR OLD FORGE, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

434105074550801 PANTHER LAKE OUTLET PRECIPITATION STATION [a]

CHEMICAL QUALITY OF PRECIPITATION, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

PERIOD OF COLLECTION	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)
Oct. 31 to Nov. 30	70	7	10	20	<.5
[b] Jan. 25	620	18	10	20	--
[b] Feb. 16	70	16	0	10	--
May 2 to June 27	340	20	10	10	--
June 27 to Aug. 17	170	17	30	20	--
Aug. 17 to Sept. 20	110	25	10	0	--

a The precipitation collector is located 20 ft (6 m) from the gage.

b Composite sample of snowcover collected from snow survey course at this station.

434105074550802 (0425437490) PANTHER LAKE OUTLET UPSTREAM FROM GAGE NEAR OLD FORGE, NY [c]

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)	SOLIDS, VOLATILE, SUSPENDED (MG/L)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)
JAN											
25...	1630	1.6	32	5.8	.0	--	--	80	0	30	10
FEB											
16...	1100	.96	34	5.6	.5	0	--	60	0	20	20
APR											
14...	1200	3.3	--	--	--	--	--	90	3	40	20
17...	1200	2.5	--	--	--	--	--	120	3	50	20
19...	1200	2.4	--	--	--	--	--	110	11	50	30
25...	1200	3.3	--	--	--	--	--	80	5	50	10
28...	1200	4.4	--	--	--	--	--	100	3	50	10
MAY											
24...	1515	1.4	34	6.8	20.0	--	--	110	5	30	30
AUG											
29...	1030	3.3	37	7.3	20.0	1	0	60	66	20	50

c Data collected at Panther Lake outlet 0.2 mi (0.3 km) upstream from station 04254375 (Panther Lake Outlet Near Old Forge, NY).

04256000 INDEPENDENCE RIVER AT DONNATTSBURG, NY

LOCATION.--Lat 43°44'50", long 75°20'05", Lewis County, Hydrologic Unit 04150101, on right bank at downstream side of highway bridge on Donnattsburg Road at Donnattsburg, 1.2 mi (1.9 km) downstream from Chase Lake Outlet, 4.2 mi (6.8 km) northeast of Glenfield, and 5.0 mi (8.0 km) upstream from mouth. Water-quality sampling site at discharge station.

DRAINAGE AREA.--91.7 mi^2 (238 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1942 to current year.

GAGE.--Water-stage recorder. Datum of gage is 972.84 ft (296.522 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 16, 1949, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods, which are poor.

AVERAGE DISCHARGE.--36 years, 192 ft^3/s (5.437 m^3/s), 28.42 in/yr (722 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,450 ft^3/s (97.7 m^3/s) May 20, 1969, gage height, 8.72 ft (2.658 m) from rating curve extended above 2,000 ft^3/s (56.6 m^3/s); minimum observed, 18 ft^3/s (0.51 m^3/s) Sept. 17, 1948, Aug. 4, 5, 1949, gage height, 2.85 ft (0.869 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,200 ft^3/s (34 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	(m^3/s)	Gage height (ft)	(m)	Date	Time	Discharge (ft^3/s)	(m^3/s)	Gage height (ft)	(m)
Oct. 2	1730	*1,460	41.3	*6.38	1.945	Jan. 10	1230	ice jam		6.22	1.896
Sept. 12	2000	1,430	40.5	6.34	1.932	Apr. 14	0830	1,430	40.5	6.35	1.936

Minimum discharge, 40 ft^3/s (1.13 m^3/s) Sept. 10, gage height, 3.14 ft (0.957 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	527	125	350	190	180	110	250	504	242	75	85	65
2	1300	121	864	180	170	100	400	363	180	72	71	57
3	942	119	663	170	170	96	450	295	212	65	62	52
4	575	233	418	160	170	94	380	267	198	59	71	49
5	430	736	280	160	170	96	470	277	158	57	75	49
6	324	518	240	160	170	100	600	298	164	54	63	47
7	258	328	220	150	170	100	580	309	144	52	59	44
8	215	313	200	150	180	96	500	324	182	51	53	43
9	277	320	190	350	190	86	400	406	227	53	52	41
10	725	277	190	1200	180	76	350	790	174	52	55	40
11	556	590	200	700	170	74	360	619	134	51	53	94
12	371	663	260	540	160	74	880	394	108	49	53	1050
13	302	418	350	400	150	74	1170	302	130	47	146	859
14	245	302	310	300	140	82	1380	264	215	46	88	339
15	227	245	560	250	140	130	882	227	215	46	66	194
16	245	230	720	230	140	170	537	201	156	51	57	145
17	439	271	500	200	140	150	451	190	119	74	58	126
18	757	482	380	210	130	130	447	185	108	80	59	109
19	551	523	270	210	120	130	673	215	136	61	57	121
20	371	375	240	210	120	120	852	198	174	52	103	117
21	284	320	220	200	120	120	924	254	174	48	132	100
22	245	518	210	190	120	140	730	410	324	47	105	89
23	251	462	190	180	120	220	653	291	277	46	75	80
24	224	418	180	170	130	190	720	221	185	45	66	73
25	198	460	190	160	130	160	829	180	136	44	83	69
26	182	400	230	300	120	130	936	153	108	43	97	64
27	172	310	220	500	120	170	918	139	97	54	85	61
28	156	270	200	350	110	280	876	125	90	103	76	63
29	146	230	190	250	---	400	812	113	88	105	84	63
30	139	220	180	210	---	350	673	236	83	110	84	63
31	132	---	180	190	---	260	---	371	---	115	75	---
TOTAL	11766	10817	9595	8820	4130	4508	20083	9121	4938	1907	2348	4366
MEAN	380	361	310	285	148	145	669	294	165	61.5	75.7	146
MAX	1300	736	864	1200	190	400	1380	790	324	115	146	1050
MIN	132	119	180	150	110	74	250	113	83	43	52	40

CAL YR 1977 TOTAL 96087 MEAN 263 MAX 2540 MIN 44
WTR YR 1978 TOTAL 92399 MEAN 253 MAX 1380 MIN 40

04256000 INDEPENDENCE RIVER AT DONNATTSBURG, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1960-61, 1964 to current year.
CHEMICAL DATA: 1960 (b), 1972 (a).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1959 to September 1961, October 1963 to March 1978 (discontinued).

INSTRUMENTATION.--Temperature recorder since October 1959.

REMARKS.--No record Mar. 3-8, due to instrument malfunction.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum (water years 1960-61, 1964-69, 1971-77), 26.5°C July 24, 1961 and Aug. 1, 2, 1975; minimum, freezing point on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Minimum, freezing point on many days during winter period.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	11.5	11.5	6.0	5.5	1.0	.5	.0	.0	.5	.0	1.0	.0
2	11.5	11.0	8.0	5.5	1.0	1.0	.0	.0	1.0	.0	.5	.0
3	11.0	10.0	9.5	8.0	1.0	1.0	1.0	.0	.5	.0	---	---
4	10.0	9.0	10.5	9.5	1.0	.5	.5	.0	.5	.0	---	---
5	10.0	9.0	10.5	10.0	1.0	.0	1.0	.0	.5	.0	---	---
6	10.5	10.0	10.5	10.0	.5	.0	.0	.0	.0	.0	---	---
7	10.5	9.0	10.5	10.0	.0	.0	.0	.0	.0	.0	---	---
8	9.0	7.0	10.0	9.0	1.0	.0	.0	.0	.0	.0	---	---
9	9.0	8.0	9.0	9.0	1.0	.0	.0	.0	.0	.0	.5	.0
10	9.0	8.5	10.0	9.0	.5	.0	.0	.0	.0	.0	.0	.0
11	9.0	8.0	10.0	6.5	1.0	.5	.5	.0	.5	.0	.0	.0
12	9.0	8.5	6.5	4.5	.5	.5	.5	.5	.5	.0	.0	.0
13	8.5	8.0	4.5	3.5	.5	.0	.5	.0	.5	.0	.5	.0
14	8.5	6.5	3.5	2.0	.5	.0	.5	.0	1.0	.0	.0	.0
15	7.0	6.5	3.0	2.0	.5	.0	.5	.0	.5	.0	.0	.0
16	6.5	6.5	4.5	3.0	.0	.0	.0	.0	1.0	.0	.0	.0
17	6.5	6.0	4.5	4.5	.5	.0	.0	.0	.5	.0	.0	.0
18	6.0	5.5	4.5	2.0	.5	.5	.0	.0	1.0	.0	.5	.0
19	6.0	5.5	2.0	2.0	.5	.5	.0	.0	1.0	.0	.0	.0
20	6.5	6.0	2.0	1.0	.5	.0	1.0	.0	.5	.0	.5	.0
21	6.5	5.5	3.0	1.5	.0	.0	.0	.0	1.0	.0	.0	.0
22	6.5	6.5	3.0	2.0	.0	.0	.5	.0	.5	.0	.0	.0
23	6.5	5.0	2.0	2.0	.5	.0	.5	.0	.5	.0	.0	.0
24	5.5	4.5	3.0	2.0	.5	.0	.5	.0	.0	.0	.0	.0
25	7.0	5.5	3.0	2.0	.5	.0	.5	.0	.0	.0	.5	.0
26	9.5	7.0	2.0	1.0	.0	.0	.0	.0	.5	.0	.5	.5
27	10.0	9.5	1.5	.5	.5	.0	.0	.0	.5	.0	.5	.5
28	10.0	9.5	1.0	.5	.5	.0	.0	.0	.5	.0	.5	.5
29	9.5	7.0	.5	.5	.5	.0	.0	.0	---	---	.5	.5
30	7.0	5.5	1.0	.5	.5	.0	.5	.0	---	---	1.5	.5
31	6.0	5.0	---	---	.5	.0	.5	.0	---	---	2.0	.5
MONTH	11.5	4.5	10.5	.5	1.0	.0	1.0	.0	1.0	.0	2.0	.0

04256485 WOODS LAKE OUTLET NEAR BIG MOOSE, NY

LOCATION.--43°51'57", long 74°57'20", Herkimer County, Hydrologic Unit 04150101, on right bank 45 ft (14 m) downstream from dam on Woods Lake. Water-quality sampling site at discharge station.

DRAINAGE AREA.--0.80 mi² (2.07 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1977 to September 1978.

GAGE.--Water-stage recorder. Altitude of gage is 1,980 ft (604 m), from topographic map.

REMARKS.--Records good.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 20 ft³/s (0.57 m³/s) Jan. 9, gage height, 1.92 ft (0.585 m), from rating curve extended above 8.0 ft³/s (0.23 m³/s); minimum 0.01 ft³/s (<0.001 m³/s) July 26, 27, Aug. 3, 5, 6, 7-9, 14-16, 24, Sept. 4, 5, 6; minimum gage height, 0.97 ft (0.296 m) Aug. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.4	.95	3.3	1.2	1.5	.55	3.9	5.5	.46	.43	.02	.02
2	7.2	.88	6.9	1.2	1.3	.52	7.3	3.8	.55	.31	.02	.02
3	5.6	.88	4.8	1.2	1.1	.52	3.9	2.4	.75	.19	.02	.02
4	4.3	1.1	3.1	1.1	1.1	.52	2.5	2.1	.70	.14	.02	.02
5	3.1	2.1	2.6	1.1	1.0	.55	6.1	1.8	.88	.09	.01	.01
6	2.6	2.4	2.9	1.0	1.0	.55	5.1	1.8	.88	.07	.02	.02
7	2.2	2.4	2.2	1.0	1.1	.52	3.9	2.0	.75	.06	.01	.02
8	2.0	2.2	1.8	.95	1.2	.52	3.5	2.0	1.4	.06	.01	.02
9	2.9	2.1	2.0	11	1.0	.52	2.4	3.5	1.3	.08	.01	.02
10	5.8	2.1	1.7	9.2	.96	.49	2.0	5.1	.81	.06	.02	.02
11	4.6	4.0	1.5	4.6	.89	.49	3.3	8.1	.70	.05	.02	.43
12	3.3	3.6	1.3	3.1	.82	.49	11	11	.52	.04	.02	3.6
13	2.8	2.6	1.2	2.2	.82	.49	9.6	6.5	.70	.04	.02	3.3
14	2.2	2.0	2.6	1.8	.82	.62	9.6	2.5	.75	.04	.02	1.8
15	1.8	3.0	8.7	1.7	.66	1.1	4.8	1.7	.62	.03	.01	1.8
16	1.8	3.6	5.5	1.5	.62	1.3	3.1	1.4	.43	.03	.02	1.6
17	2.4	3.1	3.6	1.4	.62	1.3	2.2	1.4	.46	.03	.06	.52
18	3.6	3.3	2.6	1.6	.58	1.2	2.2	.49	.66	.02	.02	.31
19	3.3	2.6	2.1	1.5	.58	1.1	3.9	.19	.88	.02	.02	.58
20	2.6	2.1	1.7	1.4	.55	1.0	6.1	.16	1.5	.02	.08	.49
21	2.1	1.8	1.8	1.7	.55	1.0	6.1	.89	1.5	.02	.03	.16
22	2.1	2.6	1.8	1.4	.55	2.0	3.9	1.6	2.2	.02	.02	.20
23	2.1	2.8	1.5	1.3	.55	2.6	3.7	1.2	1.8	.02	.02	.17
24	2.0	2.8	1.4	1.2	.55	2.2	4.8	.96	1.5	.02	.02	.15
25	1.8	2.8	1.6	1.1	.55	1.7	6.9	.95	1.2	.02	.04	.09
26	1.8	2.9	2.0	1.8	.55	1.8	7.7	.66	.81	.01	.02	.05
27	1.8	2.6	1.8	3.1	.55	4.5	7.7	.58	.70	.02	.02	.04
28	1.6	2.2	1.6	2.9	.55	6.5	7.7	.49	.66	.02	.02	.05
29	1.5	2.0	1.4	2.1	---	4.2	6.9	.49	.95	.03	.03	.05
30	1.3	1.7	1.3	1.8	---	2.5	4.6	.66	.62	.09	.03	.04
31	1.2	---	1.3	1.7	---	1.8	---	.55	---	.04	.02	---
TOTAL	88.8	71.21	79.6	69.85	22.62	45.15	156.4	72.47	27.64	2.12	.72	15.62
MEAN	2.86	2.37	2.57	2.25	.81	1.46	5.21	2.34	.92	.068	.023	.52
MAX	7.2	4.0	8.7	11	1.5	6.5	11	11	2.2	.43	.08	3.6
MIN	1.2	.88	1.2	.95	.55	.49	2.0	.16	.43	.01	.01	.01
CFSM	3.58	2.96	3.21	2.81	1.01	1.83	6.51	2.93	1.15	.09	.03	.65
IN.	4.12	3.31	3.70	3.24	1.05	2.10	7.26	3.37	1.28	.10	.03	.73

WTR YR 1978 TOTAL 652.20 MEAN 1.79 MAX 11 MIN .01 CFSM 2.24 IN 30.29

04256485 WOODS LAKE OUTLET NEAR BIG MOOSE, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1977 to September 1978.
MINOR ELEMENTS DATA: 1978 (e).

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	SOLIDS, VOLA-TILE, SUS-PENDED (MG/L)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)
NOV											
02...	1445	.83	28	3.9	9.0	--	--	70	2	60	30
DEC											
01...	1330	2.8	30	3.6	2.0	5	--	80	5	[illegible]0	30
FEB											
15...	1100	.69	31	4.2	.5	0	--	90	0	60	20
MAR											
08...	1500	.46	33	4.2	1.0	--	--	130	35	60	30
23...	1700	2.9	29	4.5	.5	--	--	90	2	60	20
APR											
12...	1400	14	38	4.5	1.0	--	--	110	5	60	20
13...	1420	11	37	4.5	1.0	--	--	90	8	50	20
14...	1100	13	--	--	--	--	--	560	--	60	60
15...	0700	7.3	--	--	--	--	--	220	3	70	40
18...	1500	4.0	--	--	--	--	--	180	2	60	40
19...	1100	6.5	--	--	--	--	--	180	6	60	30
20...	0700	8.7	--	--	--	--	--	130	7	60	30
21...	0300	9.2	--	--	--	--	--	350	9	60	40
21...	2300	7.7	--	--	--	--	--	290	3	80	110
22...	1900	6.9	--	--	--	--	--	360	12	60	50
23...	1500	9.2	--	--	--	--	--	190	3	70	30
24...	1100	7.7	--	--	--	--	--	170	7	60	30
MAY											
01...	1745	6.9	32	4.5	3.0	--	--	110	2	50	20
12...	1430	9.7	23	4.1	--	--	--	290	3	60	30
24...	0845	.88	24	4.9	15.0	--	--	140	4	70	20
JUN											
21...	2330	2.3	--	--	--	--	--	770	48	50	30
22...	1130	2.3	--	--	--	--	--	1500	63	60	30
28...	1030	.73	31	4.9	21.0	--	--	60	9	60	20
30...	1115	.73	23	5.0	21.0	--	--	70	9	60	10
AUG											
17...	1000	.06	20	4.8	--	0	0	270	16	50	20
29...	0930	.03	19	5.0	19.0	4	2	260	69	50	60
SEP											
11...	1830	.18	35	4.4	--	0	0	1500	22	80	110
11...	1945	.38	36	4.3	--	0	0	1400	8	60	70
12...	0300	1.0	49	4.1	--	0	0	540	9	60	70
13...	0300	1.5	54	4.0	--	0	0	150	15	50	110
13...	0930	1.1	21	4.8	14.5	0	0	80	7	70	20
13...	1100	1.5	96	3.7	--	0	0	150	34	40	90
14...	1100	1.0	60	4.0	--	0	0	220	9	50	80
15...	1900	1.7	39	4.1	--	0	0	220	5	60	60
19...	1200	.81	23	4.4	--	0	0	70	3	50	30

435157074572001 WOODS LAKE OUTLET PRECIPITATION STATION a/

CHEMICAL QUALITY OF PRECIPITATION, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

PERIOD OF COLLECTION	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)
Nov. 1 to Dec. 1	40	11	20	20	<.5
b/ Feb. 15	200	4	10	20	--
Mar. 8 to Apr. 13	50	57	10	0	--
b/ Apr. 13	200	46	10	10	--
Apr. 13 to May 24	70	17	0	10	--
May 24 to June 28	60	20	10	10	--
June 28 to Aug. 17	120	21	20	10	--
Aug. 17 to Sept. 19	20	25	20	0	--

[a] The precipitation collector is located 200 ft (61 m) west of the gage.

[b] Composite sample of snowcover collected from snow survey course at this station.

04256500 STILLWATER RESERVOIR NEAR BEAVER RIVER, NY

LOCATION.--Lat 43°53'50", long 75°03'05", Herkimer County, Hydrologic Unit 04150101, in gatehouse at Stillwater Dam on Beaver River, 2.5 mi (4.0 km) upstream from Moshier Creek, and 7.5 mi (12.1 km) west of Beaver River Post Office.

DRAINAGE AREA.--172 mi² (445 km²).

PERIOD OF RECORD.--May 1908 to current year. Prior to February 1925, monthend contents only, published in WSP 1307. February 1925 to September 1937, published in WSP 824.

GAGE.--Nonrecording gage read once daily and prior to reservoir gate changes. Datum of gage is National Geodetic Vertical Datum, adjustment of 1912.

REMARKS.--Reservoir originally formed about 1885; enlarged at various times and in 1924 enlarged to a usable capacity of 4,623 mil ft³ (131 hm³) between elevations 1,650.3 ft (503.01 m) and 1,679.3 ft (511.85 m) (top of 24-inch flashboards in place throughout year). Elevation of gate sill of lowest outlet, 1,642.3 ft (500.57 m). Capacity below elevation 1,650.3 ft (503.01 m), 90 mil ft³ (2.55 hm³), is included in records presented herein, but is not ordinarily available for release. Reservoir is used to regulate flow of Beaver and Black Rivers for flood control, power development, and general public welfare.

EXTREMES FOR PERIOD OF RECORD.--Maximum observed elevation, 1,680.08 ft (512.088 m) May 20, 1969, contents, 4,939 mil ft³ (140 hm³); minimum observed since first filling, 1,644.80 ft (501.335 m) Mar. 25-27, 1949, contents, 8 mil ft³ (0.227 hm³).

EXTREMES FOR CURRENT YEAR.--Maximum observed elevation, 1,678.92 ft (511.735 m) Dec. 6, contents, 4,603 mil ft³ (130 hm³); minimum observed, 1,658.87 ft (505.624 m) Mar. 27, contents, 694 mil ft³ (19.7 hm³).

Capacity table, current year (elevation, in feet, and contents, in millions of cubic feet)

1,658.0	604	1,670.0	2,431
1,660.0	821	1,675.0	3,556
1,665.0	1,518	1,680.0	4,916

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
INSTANTANEOUS OBSERVATIONS AT 0800

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1674.71	1677.81	1678.53	1676.57	1671.37	1663.08	1659.58	1675.84	1678.67	1676.96	1672.14	1668.31
2	1675.17	1677.72	1678.65	1676.32	1671.07	1662.92	1659.93	1676.14	1678.59	1676.83	1671.95	1668.22
3	1675.63	1677.64	1678.77	1676.11	1670.75	1662.76	1660.46	1676.40	1678.63	1676.70	1671.83	1668.11
4	1676.01	1677.60	1678.83	1675.86	1670.44	1662.62	1660.93	1676.62	1678.59	1676.57	1671.74	1668.02
5	1676.27	1677.80	1678.86	1675.53	1670.10	1662.57	1661.56	1676.84	1678.54	1676.42	1671.66	1667.77
6	1676.47	1677.88	1678.92	1675.35	1669.76	1662.32	1662.32	1677.03	1678.52	1676.29	1671.56	1667.55
7	1676.56	1677.92	1678.90	1675.10	1669.46	1662.07	1662.98	1677.21	1678.46	1676.14	1671.48	1667.35
8	1676.61	1677.92	1678.82	1674.85	1669.11	1661.80	1663.48	1677.39	1678.47	1676.03	1671.36	1667.14
9	1676.68	1677.91	1678.87	1674.95	1668.75	1661.55	1663.87	1677.62	1678.47	1675.89	1671.27	1666.90
10	1677.03	1677.90	1678.68	1675.30	1668.40	1661.30	1664.25	1678.00	1678.46	1675.74	1671.22	1666.66
11	1677.27	1678.01	1678.57	1675.37	1668.02	1661.05	1664.61	1678.34	1678.37	1675.60	1671.13	1666.52
12	1677.39	1678.10	1678.45	1675.37	1667.64	1660.80	1665.31	1678.55	1678.26	1675.46	1671.05	1666.65
13	1677.49	1678.13	1678.37	1675.26	1667.25	1660.55	1666.09	1678.65	1678.24	1675.33	1670.98	1667.36
14	1677.55	1678.12	1678.28	1675.15	1666.83	1660.30	1667.07	1678.71	1678.21	1675.18	1670.88	1667.56
15	1677.61	1678.10	1678.39	1675.00	1666.45	1660.29	1667.81	1678.65	1678.13	1675.00	1670.79	1667.57
16	1677.68	1678.08	1678.50	1674.82	1666.02	1660.26	1668.34	1678.60	1678.14	1674.84	1670.56	1667.60
17	1677.79	1678.08	1678.50	1674.64	1665.60	1660.12	1668.75	1678.55	1678.13	1674.68	1670.38	1667.64
18	1678.07	1678.12	1678.45	1674.52	1665.19	1659.94	1669.12	1678.55	1678.02	1674.54	1670.17	1667.64
19	1678.21	1678.22	1678.35	1674.25	1664.75	1659.72	1669.57	1678.62	1677.97	1674.33	1669.97	1667.63
20	1678.26	1678.24	1678.22	1674.04	1664.32	1659.48	1670.10	1678.65	1677.94	1674.13	1669.84	1667.61
21	1678.30	1678.24	1678.11	1673.87	1663.88	1659.24	1670.68	1678.75	1677.89	1673.94	1669.73	1667.57
22	1678.28	1678.29	1678.03	1673.65	1663.43	1659.25	1671.17	1678.87	1677.88	1673.75	1669.54	1667.47
23	1678.28	1678.36	1677.86	1673.39	1663.40	1659.27	1671.62	1678.91	1677.81	1673.57	1669.31	1667.32
24	1678.26	1678.38	1677.72	1673.12	1663.37	1659.21	1672.19	1678.88	1677.72	1673.37	1669.22	1667.14
25	1678.23	1678.44	1677.67	1672.85	1663.35	1659.05	1672.62	1678.85	1677.63	1673.17	1669.23	1666.98
26	1678.19	1678.50	1677.56	1672.62	1663.31	1658.90	1673.20	1678.78	1677.54	1672.93	1669.14	1666.82
27	1678.14	1678.47	1677.44	1672.50	1663.27	1658.87	1673.81	1678.72	1677.43	1672.76	1669.09	1666.62
28	1678.09	1678.49	1677.29	1672.34	1663.22	1659.16	1674.41	1678.63	1677.32	1672.71	1668.92	1666.43
29	1678.02	1678.50	1677.13	1672.12	---	1659.44	1674.49	1678.54	1677.21	1672.55	1668.73	1666.27
30	1677.95	1678.45	1677.00	1671.86	---	1659.61	1675.47	1678.73	1677.11	1672.48	1668.57	1666.22
31	1677.88	---	1676.77	1671.66	---	1659.61	---	1678.82	---	1672.33	1668.38	---
MEAN	1677.36	1678.11	1678.21	1674.33	1666.73	1660.55	1667.52	1678.11	1678.08	1674.72	1670.38	1667.29
MAX	1678.30	1678.50	1678.92	1676.57	1671.37	1663.08	1675.47	1678.91	1678.67	1676.96	1672.14	1668.31
MIN	1674.71	1677.60	1676.77	1671.66	1663.22	1658.87	1659.58	1675.84	1677.11	1672.33	1668.38	1666.22
†	4,296	4,483	3,975	2,739	1,232	744	3,737	4,546	4,074	2,899	2,103	1,721
‡	+309	+72.1	-190	-461	-623	-171	+1,143	+302	-182	-439	-297	-147

CAL YR 1977 MEAN 1673.19 MAX 1679.47 MIN 1659.02 ‡ +33.3
WTR YR 1978 MEAN 1672.66 MAX 1678.92 MIN 1658.87 ‡ -55.4

† Contents, in millions of cubic feet, at 2400 hours on last day of month by interpolation.
‡ Change in contents, equivalent in cubic feet per second.

04257000 BEAVER RIVER BELOW STILLWATER DAM, NEAR BEAVER RIVER, NY

LOCATION.--Lat 43°53'50", long 75°03'05", Herkimer County, Hydrologic Unit 04150101, in gatehouse at Stillwater Dam, 2.5 mi (4.0 km) upstream from Moshier Creek, and 7.5 mi (12.1 km) west of Beaver River Post Office.

DRAINAGE AREA.--172 mi^2 (445 km^2).

PERIOD OF RECORD.--May 1908 to current year. Published as "at State dam, near Beaver River" prior to June 1924.

REVISED RECORDS.--WSP 714: Drainage area. WRD NY 1973: 1971.

GAGE.--Nonrecording gage read once daily and after reservoir gate changes. Datum of gage is National Geodetic Vertical Datum, adjustment of 1912. Prior to June 1, 1924, nonrecording gage at present site and datum. June 1, 1924 to Nov. 14, 1929, nonrecording gage at site 1,000 ft (305 m) downstream at same datum.

REMARKS.--Records poor. Flow regulated by Stillwater Reservoir (see station 04256500). Discharge determined from ratings for gates and spillway of Stillwater Dam applied to log of reservoir elevation and gate operation.

COOPERATION.--Records furnished by Board of Hudson River-Black River Regulating District.

AVERAGE DISCHARGE.--70 years, 378 ft^3/s (10.70 m^3/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 3,700 ft^3/s (105 m^3/s) May 3, 1926; practically no flow at times when gates in dam were closed.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 1,240 ft^3/s (35.1 m^3/s) Jan. 26, minimum daily, 54 ft^3/s (1.53 m^3/s) Apr. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	241	617	634	1150	1210	449	613	72	631	599	649	293
2	55	616	635	1160	1200	447	381	73	630	598	547	293
3	55	614	640	1150	1200	447	54	74	630	597	370	292
4	56	612	642	1150	1190	445	55	74	629	596	369	515
5	56	615	643	1150	1180	443	56	151	628	595	369	624
6	281	617	776	1140	1170	540	58	253	627	594	368	620
7	404	618	854	1140	1170	591	58	254	626	592	367	617
8	404	618	853	1140	1160	587	58	255	625	592	367	614
9	405	618	851	1140	1150	582	58	257	625	590	366	616
10	407	618	849	1140	1140	577	59	263	625	588	365	608
11	408	621	845	1140	1140	572	60	264	624	587	365	606
12	409	624	840	1140	1120	567	61	439	622	585	365	301
13	410	625	957	1140	1120	562	62	596	620	584	364	64
14	410	625	1020	1140	1100	557	63	701	619	619	363	223
15	410	624	1020	1140	1100	555	64	737	420	632	552	303
16	414	624	1030	1140	1080	604	64	735	320	629	659	303
17	549	624	1030	1130	1080	627	65	505	516	628	657	303
18	621	625	1030	1180	1060	623	66	380	617	632	654	303
19	625	626	1020	1200	1050	618	66	381	614	674	650	303
20	627	627	1020	1190	1040	613	66	382	612	672	649	303
21	628	627	1020	1190	1030	608	67	384	612	669	648	492
22	627	627	1010	1180	553	605	68	464	611	667	646	595
23	627	624	1010	1150	295	606	69	593	611	666	450	593
24	627	631	1000	1170	294	605	70	637	610	663	299	592
25	626	632	1000	1220	294	602	70	636	609	661	299	589
26	626	633	998	1240	295	603	70	635	608	657	298	587
27	625	632	995	1230	296	597	71	633	604	655	596	585
28	624	633	991	1230	412	601	72	631	602	655	658	583
29	623	633	988	1230	---	608	72	629	601	654	636	430
30	620	632	1040	1220	---	614	72	631	601	652	634	62
31	617	---	1110	1220	---	615	---	632	---	651	407	---
TOTAL	14117	18717	28351	36320	26129	17571	2788	13355	17931	19433	14986	13212
MEAN	455	624	915	1172	933	570	92.9	431	598	627	483	440
MAX	628	633	1110	1240	1210	627	613	737	631	674	659	624
MIN	55	612	634	1130	294	443	54	72	320	584	298	62

CAL YR 1977 TOTAL 192608 MEAN 528 MAX 1500 MIN 52
WTR YR 1978 TOTAL 223010 MEAN 611 MAX 1240 MIN 54

04258000 BEAVER RIVER AT CROGHAN, NY

LOCATION.--Lat 43°53'50", long 75°24'16", Lewis County, Hydrologic Unit 04150101, on left bank 1,200 ft (366 m) upstream from Black Creek, and 0.5 mi (0.8 km) west of Croghan.

DRAINAGE AREA.--294 mi^2 (761 km^2).

PERIOD OF RECORD.--September 1930 to current year.

REVISED RECORDS.--WSP 759: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 806.20 ft (245.730 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Flow regulated by Stillwater Reservoir (see station 04256500). Between Stillwater Dam and this station, flow is further regulated by several powerplant ponds. Diurnal fluctuation at low and medium flow.

AVERAGE DISCHARGE.--48 years, 592 ft^3/s (16.77 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,100 ft^3/s (144 m^3/s) May 21, 1969, gage height, 6.98 ft (2.128 m); minimum, 11 ft^3/s (0.31 m^3/s) Jan. 22, 29, Feb. 4, 1967, gage height, 0.63 ft (0.192 m); minimum daily, 22 ft^3/s (0.62 m^3/s) July 18, 1965.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,460 ft^3/s (69.7 m^3/s) Jan. 10, gage height, 5.05 ft (1.539 m); minimum, 21 ft^3/s (0.595 m^3/s) Sept. 2, gage height, 0.80 ft (0.244 m); minimum daily, 33 ft^3/s (0.93 m^3/s) Sept. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	828	729	1060	1160	1370	728	984	752	746	771	567	644
2	1360	716	1160	1200	1370	665	1040	613	785	454	695	94
3	1550	697	1140	1240	1360	695	920	671	772	629	476	33
4	1480	761	1130	1310	1330	695	906	568	791	542	395	172
5	922	1110	1100	1230	1320	665	1140	373	772	588	402	713
6	666	1210	1140	1210	1300	678	1060	329	778	705	405	834
7	515	1020	1060	1200	1290	690	1060	282	721	638	575	606
8	351	1380	956	1220	1280	708	1040	263	602	428	681	526
9	570	1090	1040	2000	1300	845	624	272	665	404	704	620
10	760	912	971	2350	1280	845	563	293	356	590	183	504
11	624	1240	880	2080	1200	831	772	275	337	397	39	761
12	490	1120	856	1780	1200	825	1080	272	759	444	314	1050
13	592	969	856	1560	1200	671	1140	318	772	528	68	1430
14	469	795	889	1390	1200	690	1150	333	798	530	660	962
15	649	819	1570	1380	1100	739	1030	436	772	433	752	907
16	602	824	2090	1300	1100	739	798	765	765	429	714	552
17	899	835	1840	1270	1100	778	831	804	505	488	720	534
18	1070	1060	1520	1290	1100	752	934	765	778	579	602	727
19	1420	1040	1400	1380	1100	714	865	660	852	597	311	480
20	1400	961	1040	1410	1100	708	970	636	906	788	289	461
21	1020	893	1170	1550	1100	702	1010	541	865	730	547	459
22	702	972	1210	1690	1100	785	865	765	838	498	712	465
23	658	961	1190	1490	1010	785	552	872	679	482	722	483
24	674	1120	1170	1420	955	759	772	648	628	444	656	321
25	784	1030	1200	1290	954	752	934	684	561	723	421	672
26	603	932	1240	1470	919	772	955	746	636	534	102	673
27	953	1010	1220	1740	909	992	892	574	673	520	182	484
28	923	985	1290	1780	878	858	791	505	736	626	684	421
29	869	904	1240	1660	---	963	818	541	512	517	552	425
30	693	903	1130	1540	---	811	696	746	605	512	580	385
31	610	---	1130	1480	---	872	---	596	---	730	613	---
TOTAL	25706	28998	36888	46070	32425	23712	27192	16898	20965	17278	15323	17398
MEAN	829	967	1190	1486	1158	765	906	545	699	557	494	580
MAX	1550	1380	2090	2350	1370	992	1150	872	906	788	752	1430
MIN	351	697	856	1160	878	665	552	263	337	397	39	33

CAL YR 1977 TOTAL 296345 MEAN 812 MAX 2480 MIN 29
WTR YR 1978 TOTAL 308853 MEAN 846 MAX 2350 MIN 33

04260500 BLACK RIVER AT WATERTOWN, NY
(National stream-quality accounting network station)
(National pesticide network station)

LOCATION.--Lat 43°59'08", long 75°55'30", Jefferson County, Hydrologic Unit 04150101, on downstream side of right abutment of Vanduzee Street Bridge at Watertown, and 3.5 mi (5.6 km) upstream from Philomel Creek. Water-quality sampling site at discharge station.

DRAINAGE AREA.--1,876 mi² (4,859 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1920 to current year.

REVISED RECORDS.--WSP 759: Drainage area. WDR NY 77-1: 1974.

GAGE.--Water-stage recorder. Datum of gage is 373.88 ft (113.959 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 3, 1921, nonrecording gage, and from Sept. 3, 1921 to Mar. 15, 1977, recording gage at same site at datum 1.00 ft (0.305 m) higher.

REMARKS.--Records good except those for winter periods, which are fair. Flow regulated by Stillwater Reservoir (see station 04256500), Fulton Chain of Lakes, and other reservoirs. Extensive diurnal fluctuation at low and medium flow caused by mills and powerplants in and above Watertown. During canal season, water is diverted out of basin through Forestport feeder and Black River Canal (flowing south), see station 04252000.

AVERAGE DISCHARGE.--58 years, 3,999 ft³/s (113.3 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 39,600 ft³/s (1,120 m³/s) Mar. 16, 1977, gage height, 12.98 ft (3.956 m); minimum, 10 ft²/s (0.28 m³/s) Sept. 2, 1934, gage height, 0.81 ft (0.247 m) present datum; minimum daily, 137 ft³/s (3.88 m³/s) Sept. 4, 1939.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge known, about 39,700 ft³/s (1,120 m³/s) Apr. 23, 1869 (from New York State Museum Bulletin 85).

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 17,000 ft³/s (480 m³/s):

Date	Time	Discharge (ft³/s)	(m³/s)	Gage height (ft)	(m)
Apr. 15	0740	19,100	541	9.35	2.850

Minimum discharge, 95 ft³/s (2.69 m³/s) July 3, gage height, 1.20 ft (0.366 m); minimum daily, 842 ft³/s (23.8 m³/s), Sept. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8940	3210	7450	4800	8850	2600	10400	12000	2800	1970	2140	1460
2	12000	3080	9600	4600	8070	2600	12200	11000	2940	1960	1900	1500
3	12700	3070	10000	4400	7340	2600	12400	9770	2700	913	1750	896
4	13900	3300	10400	4300	6660	2500	11800	8690	2750	1670	1460	842
5	13500	6340	10100	4300	5880	2500	12700	7630	2980	1470	2200	883
6	11600	6900	9060	4200	5450	2500	12900	6920	2800	1620	2630	1380
7	9500	6760	7900	4200	5040	2500	13000	6530	2740	1430	2320	1510
8	7820	6900	6660	4420	4880	2500	13100	6460	2670	1350	2160	1360
9	6680	7580	4860	6260	4600	2500	12100	6590	2880	1300	2100	1280
10	7610	7450	3330	8850	4400	2500	10800	7450	3240	1290	1880	1180
11	8120	8730	3600	11600	4200	2500	10200	8590	2960	1430	1380	1320
12	8940	9790	4100	13500	4000	2470	12500	10200	2620	1260	1050	3570
13	9100	9600	4770	13600	3900	2780	14400	9960	2720	1270	1310	6940
14	8290	9250	5150	12400	3800	2730	17900	8780	2770	1310	1400	7270
15	7240	8370	6390	11000	3600	3310	18700	7600	3040	1300	1930	7150
16	6550	7530	7770	9630	3500	4370	16700	6960	3040	1230	1900	5910
17	7210	7140	9160	8490	3400	5180	14100	6510	2770	1230	1910	4020
18	9220	7880	10400	7530	3300	5400	12400	6030	2260	1570	1680	3010
19	9600	8550	10500	6740	3200	5160	11700	5640	2380	1390	1470	2760
20	10100	8700	9600	6160	3100	4870	11500	5340	2750	1420	1290	2790
21	9950	8490	8550	5780	3100	4670	12500	4900	3180	1490	1390	2960
22	8760	8940	7660	5380	3000	5440	12900	4900	2990	1440	1820	2510
23	7530	8880	7140	5170	2900	6680	12600	5270	3860	1250	1880	2320
24	6420	9100	6630	5110	2900	7300	11800	5100	3700	1150	1810	2050
25	5780	9220	6420	4970	2800	7410	11300	4300	2960	1160	1570	1740
26	5000	9060	6000	5220	2700	7230	11600	3840	2430	1360	1400	2140
27	4550	8700	5800	6310	2700	7390	12100	3410	2220	1240	1190	2050
28	4400	8260	5600	7960	2700	8060	12500	3000	2100	1230	1420	1540
29	4170	7560	5200	8940	---	8740	12700	2740	2170	1690	1920	1740
30	3700	6920	5000	9630	---	9280	12600	2510	2020	2280	1670	1690
31	3480	---	4900	9570	---	9690	---	2930	---	2190	1650	---
TOTAL	252360	225260	219700	225020	119970	145960	384100	201550	83440	44863	53580	77771
MEAN	8141	7509	7087	7259	4285	4708	12800	6502	2781	1447	1728	2592
MAX	13900	9790	10500	13600	8850	9690	18700	12000	3860	2280	2630	7270
MIN	3480	3070	3330	4200	2700	2470	10200	2510	2020	913	1050	842

CAL YR 1977 TOTAL 2118086 MEAN 5803 MAX 38800 MIN 884
WTR YR 1978 TOTAL 2033574 MEAN 5571 MAX 18700 MIN 842

04260500 BLACK RIVER AT WATERTOWN, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1956-60, 1962 to current year.
CHEMICAL DATA: 1956 (e), 1959 (a), 1960 (b), 1965 (a), 1966-78 (d).
MINOR ELEMENTS DATA: 1970-71 (a), 1972-73 (a, sampling site at station 04260505, located 0.9 mi or 1.4 km downstream), 1974-78 (b).
RADIOLOGICAL DATA: 1972-74 (a, sampling site at station 04260505).
PESTICIDE DATA: 1972-75 (a, sampling site at station 04260505), 1975-77 (b), 1978 (a).
ORGANIC DATA: TOC--1973 (c), 1974 (a), 1975 (c), 1976-77 (b), 1978 (c).
PCB--1978 (a).
NUTRIENT DATA: 1968 (b), 1969-78 (d).
BIOLOGICAL DATA:
Coliform bacteria--1973-78 (d).
Phytoplankton--1975-77 (d), 1978 (c).
Periphyton--1975-78 (b).
SEDIMENT DATA: 1975-76 (d), 1977 (c), 1978 (d).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1955 to September 1959, July 1962 to March 1969.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	TURBIDITY (NTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS (MG/L AS CACO3)
OCT												
26...	0815	4970	96	7.5	11.5	1	--	9.6	84	100	38	35
NOV												
22...	0815	8500	114	7.3	3.0	3	--	13.8	104	280	560	42
DEC												
19...	1030	10500	104	7.2	1.0	3	--	13.0	92	257	200	35
JAN												
25...	0900	4900	100	7.1	1.0	2	--	11.2	79	--	107	35
MAR												
22...	0915	5290	148	7.4	2.0	3	--	11.0	80	720	1800	56
APR												
13...	0830	13890	116	7.2	5.5	25	--	9.8	79	1000	1133	42
25...	0830	11600	68	7.4	8.0	3	--	11.2	96	300	K120	25
MAY												
24...	1330	5080	73	6.8	18.5	4	--	8.3	89	K80	K70	28
JUN												
27...	0830	2100	67	7.2	21.0	--	3.0	8.1	91	4600	220	29
JUL												
25...	0945	1170	88	7.6	24.0	--	2.0	8.1	96	283	K1220	32
AUG												
16...	0800	2110	100	7.3	25.0	--	1.0	8.1	98	360	390	35
SEP												
12...	0900	2140	82	7.1	16.0	--	1.0	10.2	104	37000	K800	32

DATE	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)
OCT												
26...	11	12	1.1	2.0	.9	29	0	24	9.0	2.3	.1	5.7
NOV												
22...	1	15	1.2	2.0	1.0	50	0	41	9.1	1.6	.0	5.5
DEC												
19...	7	12	1.1	1.9	.8	34	0	28	8.2	1.9	.0	5.2
JAN												
25...	8	12	1.1	2.1	.8	32	0	26	9.0	2.1	.1	6.2
MAR												
22...	3	20	1.5	3.4	1.2	65	0	53	15	2.1	.1	6.4
APR												
13...	12	15	1.1	1.8	1.1	37	0	30	7.2	1.5	.1	3.5
25...	9	8.5	.8	1.5	.7	19	0	16	7.7	.7	.1	3.7
MAY												
24...	7	9.7	.9	1.7	.8	25	0	21	8.8	3.6	.0	4.2
JUN												
27...	10	10	.9	2.0	.7	--	--	19	6.3	2.2	.1	5.4
JUL												
25...	7	11	1.0	2.4	.7	--	--	25	8.0	1.1	.1	5.5
AUG												
16...	10	12	1.3	3.7	.9	--	--	25	13	1.8	.1	6.0
SEP												
12...	3	11	1.2	3.8	.7	--	--	29	12	2.3	.1	5.2

K Results based on colony count outside the acceptable range (non-ideal colony count).

04260500 BLACK RIVER AT WATERTOWN, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)
OCT												
26...	66	48	.24	.01	.30	.31	.22	.55	.01	.00	4	4
NOV												
22...	66	60	.35	--	--	.45	--	.80	.02	--	--	--
DEC												
19...	62	48	--	--	--	--	--	--	--	--	--	--
JAN												
25...	66	49	.49	--	--	.27	--	.76	.01	--	--	--
MAR												
22...	82	82	.64	.06	.34	.40	.33	1.0	.03	.00	1	1
APR												
13...	60	50	.56	.03	.36	.39	.13	.95	.03	.00	0	0
25...	49	33	.52	.00	.22	.22	.27	.74	.01	.00	--	--
MAY												
24...	51	42	.33	.01	.32	.33	.25	.66	.02	.00	--	--
JUN												
27...	62	39	.11	.00	.41	.41	.18	.52	.02	.01	--	--
JUL												
25...	64	45	.34	.05	.49	.54	.57	.88	.06	.03	5	1
AUG												
16...	64	54	.22	.03	--	--	--	--	.05	.02	--	--
SEP												
12...	62	54	.01	--	--	--	1.2	--	.02	.03	--	--

DATE	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	BARIUM, DISSOLVED (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)
OCT											
26...	0	0	0	0	<10	3	0	0	2	0	470
NOV											
22...	--	--	--	--	--	--	--	--	--	--	--
DEC											
19...	--	--	--	--	--	--	--	--	--	--	--
JAN											
25...	--	--	--	--	--	--	--	--	--	--	--
MAR											
22...	100	100	1	1	10	0	0	0	6	2	590
APR											
13...	0	0	0	1	10	1	0	0	10	10	2100
25...	--	--	--	--	--	--	--	--	--	--	--
MAY											
24...	--	--	--	--	--	--	--	--	--	--	--
JUN											
27...	--	--	--	--	--	--	--	--	--	--	--
JUL											
25...	0	0	1	1	20	2	0	0	4	2	490
AUG											
16...	--	--	--	--	--	--	--	--	--	--	--
SEP											
12...	--	--	--	--	--	--	--	--	--	--	--

STREAMS TRIBUTARY TO LAKE ONTARIO

04260500 BLACK RIVER AT WATERTOWN, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	SILVER, DISSOLVED (UG/L AS AG)
OCT 26...	220	5	1	40	40	<.5	<.5	0	0	0	0
NOV 22...	--	--	--	--	--	--	--	--	--	--	--
DEC 19...	--	--	--	--	--	--	--	--	--	--	--
JAN 25...	--	--	--	--	--	--	--	--	--	--	--
MAR 22...	270	8	4	80	60	<.5	<.5	0	0	0	0
APR 13...	80	2	0	70	20	<.5	<.5	0	0	0	0
25...	--	--	--	--	--	--	--	--	--	--	--
MAY 24...	--	--	--	--	--	--	--	--	--	--	--
JUN 27...	--	--	--	--	--	--	--	--	--	--	--
JUL 25...	140	6	2	50	10	<.5	<.5	0	0	0	0
AUG 16...	--	--	--	--	--	--	--	--	--	--	--
SEP 12...	--	--	--	--	--	--	--	--	--	--	--

DATE	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C)
OCT 26...	10	10	--	9.2	--
NOV 22...	--	--	14	--	--
DEC 19...	--	--	9.2	--	--
JAN 25...	--	--	4.6	--	--
MAR 22...	20	10	--	4.4	.8
APR 13...	20	20	--	5.5	1.2
25...	--	--	10	--	--
MAY 24...	--	--	9.1	--	--
JUN 27...	--	--	10	--	--
JUL 25...	30	10	--	13	.9
AUG 16...	--	--	5.5	--	--
SEP 12...	--	--	4.2	--	--

04260500 BLACK RIVER AT WATERTOWN, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	PCB, TOTAL (UG/L)	AROCLOR TOT. IN BOT MAT 1242 PCB SERIES (UG/KG)	AROCLOR TOT. IN BOT MAT 1254 PCB SERIES (UG/KG)	ATRAZINE, TOTAL (UG/L)	ATRAZINE, TOTAL IN BOTTOM MATERIAL (UG/KG)	ALDRIN, TOTAL (UG/L)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL (UG/L)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL (UG/L)
NOV 22...	ND	51	40	ND	ND	ND	ND	ND	ND	ND
MAR 22...	ND	--	--	ND	--	ND	--	ND	--	ND

DATE	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL (UG/L)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL (UG/L)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL (UG/L)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN TOTAL (UG/L)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL (UG/L)
NOV 22...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MAR 22...	--	ND	--	ND	--	ND	--	ND	--	ND

DATE	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL (UG/L)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL (UG/L)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE TOTAL (UG/L)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL (UG/L)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL (UG/L)
NOV 22...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MAR 22...	--	ND	--	ND	--	ND	--	ND	--	ND

DATE	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOTAL (UG/L)	METHYL PARATHION, TOTAL (UG/L)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRITHION, TOTAL (UG/L)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG)	PARATHION, TOTAL (UG/L)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	SIMAZINE TOTAL COULSON COND. (UG/L)	SIMAZINE IN BOTTOM MATERIAL (UG/KG DRY SOLIDS)
NOV 22...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MAR 22...	--	ND	ND	--	ND	--	ND	--	ND	--

DATE	TOXAPHENE, TOTAL (UG/L)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)	TOTAL TRITHION (UG/L)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	2,4-D, TOTAL (UG/L)	2,4-D, TOTAL IN BOTTOM MATERIAL (UG/KG)	2,4,5-T TOTAL (UG/L)	2,4,5-T TOTAL IN BOTTOM MATERIAL (UG/KG)	SILVEX, TOTAL (UG/L)	SILVEX, TOTAL IN BOTTOM MATERIAL (UG/KG)
NOV 22...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MAR 22...	ND	--	ND	--	ND	--	ND	--	ND	--

ND Material specifically analyzed for, but not detected.

04260500 BLACK RIVER AT WATERTOWN, NY--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

PHYTOPLANKTON

DATE	NOV 22,77		MAY 24,78	
TIME	0815		1330	
TOTAL CELLS/ML	340		92	
DIVERSITY: DIVISION	0.7		0.0	
.CLASS	0.7		0.0	
..ORDER	0.7		0.0	
...FAMILY	1.1		2.4	
....GENUS	1.1		2.4	
ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CHRYSOPHYTA				
.BACILLARIOPHYCEAE				
..PENNALES				
...DIATOMACEAE				
....DIATOMA	--	-	9	10
...FRAGILARIACEAE				
....SYNEDRA	27	8	27#	30
...GOMPHONEMATACEAE				
....GOMPHONEMA	7	2	--	-
...MERIDIONACEAE				
....MERIDION	--	-	9	10
...NAVICULACEAE				
....NAVICULA	--	-	18#	20
....PINNULARIA	14	4	--	-
...NITZSCHIACEAE				
....NITZSCHIA	21	6	18#	20
...TABELLARIACEAE				
....TABELLARIA	--	-	9	10
CYANOPHYTA (BLUE-GREEN ALGAE)				
.CYANOPHYCEAE				
..HORMOGONALES				
...OSCILLATORIACEAE				
....OSCILLATORIA	270#	80	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

PERIPHYTON

Dates of exposure	Length of exposure (days)	Biomass (g/m^2) Dry weight	Biomass (g/m^2) Ash weight	Chlorophyll a (mg/m^2)	Chlorophyll b (mg/m^2)	Sampling method
Oct. 27 to Nov. 22	26	0.157	0.079	0.120	0.000	Polyethylene strip
May 24 to June 27	34	2.36	1.42	.640	.000	Polyethylene strip
July 25 to Aug. 24	30	1.26	.551	12.3	2.34	Polyethylene strip
Aug. 24 to Sept. 27	34	.630	.472	.210	.000	Polyethylene strip

SUSPENDED-SEDIMENT MEASUREMENTS, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
OCT 26...	0815	4970	3	40
NOV 22...	0815	8500	6	138
DEC 19...	1030	10500	11	312
JAN 25...	0900	4900	3	40
MAR 22...	0915	5290	9	129
APR 13...	0830	13890	57	2140
25...	0830	11600	10	313
MAY 24...	1330	5080	11	151
JUN 27...	0830	2100	12	68
JUL 25...	0945	1170	15	47
AUG 16...	0800	2110	5	28
SEP 12...	0900	2140	4	23

LAKES AND RESERVOIRS IN STREAMS TRIBUTARY TO LAKE ONTARIO

04221990 RUSHFORD LAKE AT CANEADA DAM, NY.--Lat 42°22'49", long 78°11'00", Allegany County, Hydrologic Unit 04130002, at Caneadea Dam, 2.3 mi (3.7 km) upstream from Caneadea Creek mouth.
Lake is formed by Caneadea Dam completed in 1928 with capacity of 1,104,000 ft^3 (31,265 m^3) and is used for power generation (see station 04221991 for monthly mean discharges).

04224000 MOUNT MORRIS LAKE NEAR MOUNT MORRIS, NY (see station for daily mean elevation, skeleton capacity table, monthly contents, and change in contents).

04227980 CONESUS LAKE NEAR LAKEVILLE, NY (see station for daily mean elevation).

04228845 HONEOYE LAKE NEAR HONEOYE, NY (see station for daily mean elevation).

04228950 CANADICE LAKE NEAR HEMLOCK, NY (see station 04229000 for observed and adjusted monthly mean discharges).

04232400 SENECA LAKE AT WATKINS GLEN, NY (see station for daily mean elevation).

04232450 KEUKA LAKE AT HAMMONDSPORT, NY (see station for daily mean elevation).

04233500 CAYUGA LAKE AT ITHACA, NY (see station for daily mean elevation).

04234500 CANANDAIGUA LAKE AT CANANDAIGUA, NY (see station for daily mean elevation).

04235396 OWASCO LAKE NEAR AUBURN, NY (see station for daily elevation).

04236000 SKANEATELES LAKE AT SKANEATELES, NY (see station for daily elevation).

04238500 ONONDAGA RESERVOIR NEAR NEDROW, NY (see station for daily mean elevation, skeleton capacity table, monthly contents, and change in contents).

04253300 SIXTH LAKE.--Lat 43°44'43", long 74°46'58", Hamilton County, Hydrologic Unit 04150101, on dam at outlet of Sixth Lake at Inlet, and 11.2 mi (18.0 km) upstream from dam at Old Forge. DRAINAGE AREA, 18.6 mi^2 (48.2 km^2). PERIOD OF RECORD, November 1911 to current year. GAGE, nonrecording gage read once daily. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Hudson River-Black River Regulating District).

The Sixth and Seventh Lakes of Fulton Chain Lakes are partially formed and controlled by the concrete dam at Inlet, while the Eighth Lake is upstream and at approximately 5 feet (1.5 m) higher elevation. Storage began around 1881. The present structure is a concrete dam with control gates which were installed in 1938. Usable capacity 296.6 mil ft^3 (8.400 hm^3) between minimum operating level, elevation 1,755.1 ft (541.05 m) and crest of spillway, elevation 1,786.0 ft (544.37 m); no dead storage below minimum operating level. Figures given herein represent total contents. The dam is operated, records collected, furnished, and stored by Board of Hudson River-Black River Regulating District.

EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 332 mil ft^3 (9.4 hm^3) Oct. 3, 1945, elevation, 1,787.1 ft (544.71 m); minimum observed, less than 900,000 ft^3 (25,500 m^3) Nov. 18, 1943, water level below elevation 1,775.6 ft (541.20 m).

EXTREMES FOR CURRENT YEAR: Maximum contents observed, 293.4 mil ft^3 (8.3 hm^3) Oct. 3, elevation, 1785.90 ft (544.34 m); minimum observed, 100.8 mil ft^3 (2.85 hm^3) Mar. 20, 21, elevation, 1779.65 ft (542.44 m).

04253400 FIRST LAKE (formerly published as "Old Forge Reservoir").--Lat 43°42'44", long 74°58'12", Herkimer County, Hydrologic Unit 04150101, at dam on Middle Branch Moose River, and 100 ft (30 m) downstream from bridge on State Highway 28 at Old Forge, 11.2 mi (18.0 km) downstream from dam on Sixth Lake outlet at Inlet. DRAINAGE AREA, 52.1 mi^2 (135 km^2). PERIOD OF RECORD, November 1911 to current year. GAGE, nonrecording gage read daily about 0800. Datum of gage is 1,700.15 ft (518.206 m) National Geodetic Vertical Datum of 1929 (levels by Board of Hudson River-Black River Regulating District).

The First through Fifth Lakes of Fulton Chain Lakes are partially formed and controlled by a concrete dam with 12-inch flashboards. Storage began around 1881 or 1882 with a wooden crib dam. This dam was replaced with a concrete dam in 1905 and gates were installed in 1927. Usable capacity with flashboards, 895.6 mil ft^3 (25.36 hm^3), gage height, 6.89 ft (2.100 m). Usable capacity without flashboards, 764.3 mil ft^3 (21.64 hm^3), gage height, 5.91 ft (1.801 m); no dead storage below minimum operating level. Figures given herein represent total contents. The dam is operated, records collected, furnished, and stored by Board of Hudson River-Black River Regulating District.

EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 1,019 mil ft^3 (28.85 hm^3) June 17, 1972, gage height, 7.78 ft (2.371 m); minimum observed, 6,500,000 ft^3 (184,000 m^3) Nov. 3, 1939, gage height, -0.35 ft (-0.107 m).

EXTREMES FOR CURRENT YEAR: Maximum contents observed, 938.0 mil ft^3 (26.56 hm^3) Sept. 12, gage height, 7.20 ft (2.195 m); minimum observed, 141.2 mil ft^3 (4.00 hm^3) Mar. 14, gage height, 0.92 ft (0.280 m).

04256500 STILLWATER RESERVOIR NEAR BEAVER RIVER, NY (see station for daily elevation, skeleton capacity table, monthly contents, and change in contents).

MONTHEND ELEVATION, GAGE HEIGHT, AND CONTENTS, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

	*Elevation (feet)	Contents (million ft^3)	Change in contents (equivalent in ft^3/s)	*Gage height (feet)	Contents (million ft^3)	Change in contents (equivalent in ft^3/s)
	04253300 Sixth Lake			04253400 First Lake		
Sept. 30	1,785.50	280.6		7.05	917.0	
Oct. 31	1,784.40	245.7	-13.0	6.11	789.1	- 47.8
Nov. 30	1,784.60	252.0	+ 2.43	5.23	675.9	- 43.7
Dec. 31	1,784.07	235.5	- 6.16	3.87	500.4	- 65.5
CAL YR 1977			+ 0.81			- 6.93
Jan. 31	1,783.80	227.0	- 3.17	3.47	450.4	- 18.7
Feb. 28	1,780.67	131.3	-39.6	2.15	288.0	- 67.1
Mar. 31	1,780.38	122.6	- 3.26	2.75	361.0	+ 27.3
Apr. 30	1,784.88	261.0	+53.4	5.59	724.0	+140.0
May 31	1,785.35	275.8	+ 5.53	7.11	925.4	+ 75.2
June 30	1,784.85	260.0	- 6.10	6.94	902.2	- 8.95
July 31	1,784.30	242.6	- 6.50	7.01	911.4	+ 3.44
Aug. 31	1,784.42	246.3	+ 1.38	6.94	902.2	- 3.44
Sept. 30	1,785.05	266.4	+ 7.75	6.31	817.3	- 32.8
WTR YR 1978			- 0.45			- 3.16

* Elevations or gage heights at 2400 hours, by interpolation.

04261000 OSWEGATCHIE RIVER AT CRANBERRY LAKE, NY

LOCATION.--Lat 44°13'15", long 74°51'00", St. Lawrence County, Hydrologic Unit 04150302, on right bank 900 ft (274 m) downstream from dam at outlet of Cranberry Lake, at village of Cranberry Lake.

DRAINAGE AREA.--144 mi² (373 km²).

PERIOD OF RECORD.--May 1923 to current year. Prior to October 1958, published as "East Branch Oswegatchie River at Cranberry Lake."

GAGE.--Water-stage recorder. Datum of gage is 1,458.23 ft (444.468 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1938, nonrecording gage at site 80 ft (24 m) upstream at same datum.

REMARKS.--Records good. Since 1867, flow regulated by Cranberry Lake.

AVERAGE DISCHARGE.--55 years, 292 ft³/s (8.269 m³/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,940 ft³/s (54.9 m³/s) May 13, 1943, gage height, 7.70 ft (2.347 m); minimum daily, 3 ft³/s (0.085 m³/s) Apr. 9-16, 1931.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 852 ft³/s (24.1 m³/s) Oct. 20; minimum daily, 154 ft³/s (4.36 m³/s) Mar. 2-4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	491	392	669	588	553	156	484	243	577	234	231	217
2	564	392	668	585	550	154	492	266	466	234	231	217
3	597	390	668	582	548	154	484	289	227	236	231	214
4	659	392	667	577	546	154	492	263	226	236	231	214
5	658	395	665	573	544	160	497	247	226	231	231	214
6	658	395	665	571	538	225	500	216	227	231	230	214
7	656	397	663	566	537	222	505	214	228	231	228	214
8	654	359	660	558	532	219	508	214	228	232	228	214
9	654	268	654	566	527	219	510	216	228	236	228	212
10	654	270	653	576	522	217	512	217	230	344	228	211
11	651	271	647	581	518	217	513	219	230	586	228	224
12	650	526	642	585	517	214	522	220	230	585	225	286
13	649	782	636	585	515	214	535	222	341	581	222	286
14	649	775	630	585	512	214	549	221	585	579	222	313
15	672	767	632	585	450	214	558	222	476	576	222	374
16	720	758	635	585	289	214	563	223	236	572	220	372
17	720	750	635	581	287	217	567	225	235	469	223	372
18	736	747	635	582	286	236	571	224	235	236	221	371
19	784	740	635	581	286	274	546	222	235	236	220	369
20	852	731	632	576	286	274	474	222	236	236	220	368
21	847	723	630	576	286	271	482	224	234	236	222	368
22	838	716	628	575	286	274	490	224	234	236	220	386
23	832	711	624	572	250	304	497	224	233	236	219	446
24	817	707	619	569	156	385	503	224	233	235	220	443
25	806	701	615	561	156	382	474	223	233	233	219	407
26	796	698	612	558	156	382	386	222	233	233	219	298
27	785	693	610	559	156	388	361	222	233	234	219	298
28	770	688	606	559	156	416	251	222	235	233	219	296
29	758	679	602	559	---	480	256	224	236	233	218	295
30	683	670	597	556	---	480	231	326	234	233	217	295
31	489	---	592	555	---	480	---	576	---	232	217	---
TOTAL	21749	17583	19726	17769	10945	8430	14313	7516	8240	9675	6929	9008
MEAN	702	586	636	573	391	272	477	242	275	312	224	300
MAX	852	782	669	588	553	480	571	576	585	586	231	446
MIN	489	268	592	555	156	154	231	214	226	231	217	211

CAL YR 1977 TOTAL 147371 MEAN 404 MAX 1030 MIN 155
WTR YR 1978 TOTAL 151883 MEAN 416 MAX 852 MIN 154

04262500 WEST BRANCH OSWEGATCHIE RIVER NEAR HARRISVILLE, NY

LOCATION.--Lat 44°11'08", long 75°19'52", Lewis County, Hydrologic Unit 04150302, on right bank just downstream from highway bridge, 0.5 mi (0.8 km) northeast of Geers Corners, 1.5 mi (2.4 km) downstream from Big Creek, and 4.0 mi (6.4 km) downstream from Harrisville.

DRAINAGE AREA.--258 mi² (668 km²).

PERIOD OF RECORD.--July 1916 to current year.

REVISED RECORDS.--WSP 759: Drainage area. WSP 784: 1934.

GAGE.--Water-stage recorder. Datum of gage is 738.51 ft (225.098 m) National Geodetic Vertical Datum of 1929. Prior to Nov. 30, 1933, nonrecording gage at same site and datum.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--62 years, 511 ft³/s (14.47 m³/s), 26.90 in/yr (683 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,080 ft³/s (200 m³/s) Mar. 15, 1977, gage height, 9.31 ft (2.838 m); maximum gage height, 9.6 ft (2.93 m) Jan. 9, 1930; minimum discharge, 25 ft³/s (0.71 m³/s) Sept. 1, 1934, gage height, 0.86 ft (0.262 m).

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 3,300 ft³/s (93 m³/s):

Date	Time	Discharge (ft³/s)	(m³/s)	Gage height (ft)	(m)
Apr. 14	1800	4,020	114	6.82	2.079

Minimum discharge, 71 ft³/s (2.01 m³/s) July 27, gage height, 1.42 ft (0.433 m); minimum daily, 73 ft³/s (2.07 m³/s) July 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	938	307	743	400	711	210	1150	1210	580	151	117	140
2	1330	304	1190	380	620	205	1300	1040	395	137	104	121
3	2030	308	1540	370	541	197	1600	886	301	125	93	108
4	2050	346	1400	360	450	190	1510	757	277	115	94	102
5	1760	884	1210	350	400	180	1500	665	261	113	92	104
6	1390	1330	933	340	370	180	1870	625	328	98	88	101
7	1050	1290	795	340	350	180	1910	630	395	96	82	98
8	791	1110	720	362	340	180	1850	644	399	91	83	96
9	672	912	635	813	330	170	1650	697	457	204	102	91
10	817	766	580	1530	320	170	1420	866	443	444	107	86
11	940	864	580	2000	300	180	1320	1010	373	265	97	98
12	919	1150	560	1780	300	180	2160	984	304	186	91	490
13	819	1230	560	1470	290	188	3300	840	283	147	106	935
14	700	1080	605	1230	280	212	3790	705	408	128	112	978
15	613	885	926	979	284	367	3410	615	525	117	96	739
16	609	771	1550	794	274	511	2400	552	465	106	83	501
17	784	832	1970	657	267	537	1800	492	373	102	128	443
18	1330	1050	1720	560	263	493	1540	454	311	102	191	357
19	1820	1310	1430	480	257	442	1530	500	296	95	159	265
20	1520	1280	1130	450	249	395	1780	519	409	90	164	232
21	1230	1130	908	430	242	414	2110	484	462	84	295	200
22	955	1100	779	410	232	710	2300	580	397	83	258	163
23	804	1170	691	400	230	949	2000	584	365	82	182	150
24	687	1170	629	400	227	980	1720	496	329	78	157	137
25	591	1110	600	405	226	920	1610	429	279	74	183	124
26	517	1040	560	472	223	725	1620	380	230	74	214	122
27	461	946	520	708	218	814	1640	332	210	73	191	111
28	412	825	490	893	214	1190	1590	282	190	75	166	106
29	378	739	470	942	---	1410	1490	269	169	83	166	116
30	350	651	440	900	---	1300	1370	293	160	95	182	130
31	326	---	420	806	---	1230	---	562	---	110	162	---
TOTAL	29593	27890	27284	22411	9008	16009	56240	19383	10374	3823	4345	7444
MEAN	955	930	880	723	322	516	1875	625	346	123	140	248
MAX	2050	1330	1970	2000	711	1410	3790	1210	580	444	295	978
MIN	326	304	420	340	214	170	1150	269	160	73	82	86
CFSM	3.70	3.61	3.41	2.80	1.25	2.00	7.27	2.42	1.34	.48	.54	.96
IN.	4.27	4.02	3.93	3.23	1.30	2.31	8.11	2.79	1.50	.55	.63	1.07

CAL YR 1977 TOTAL 245765 MEAN 673 MAX 6820 MIN 72 CFSM 2.61 IN 35.44
WTR YR 1978 TOTAL 233804 MEAN 641 MAX 3790 MIN 73 CFSM 2.48 IN 33.71

04263000 OSWEGATCHIE RIVER NEAR HEUVELTON, NY
(National stream-quality accounting network station)

LOCATION.--Lat 44°35'58", long 75°22'45", St. Lawrence County, Hydrologic Unit 04150302, on right bank 1.5 mi (2.4 km) downstream from Beaver Creek, and 2.5 mi (4.0 km) upstream from Heuvelton. Water-quality sampling site at discharge station.

DRAINAGE AREA.--973 mi^2 (2,520 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1916 to current year.

REVISED RECORDS.--WSP 759: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 288.85 ft (88.041 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 16, 1916, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods, which are poor. Since 1867, seasonal flow regulated by Cranberry Lake; slight diurnal fluctuation at low flow and medium flow caused by powerplants. During high stages on Grass River, part of flow of that stream may pass through Upper Lake, Indian Creek and Lower Lake and enter Oswegatchie River at Rensselaer Falls, 4.5 mi (7.2 km) above station. In October 1973, a dike was installed on Indian Creek to prevent overflow of Grass River during high flows.

AVERAGE DISCHARGE.--62 years, 1,712 ft^3/s (48.48 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,600 ft^3/s (555 m^3/s) Apr. 6, 1960, gage height, 10.36 ft (3.158 m); minimum recorded, 130 ft^3/s (3.68 m^3/s) Aug. 17, 1949, gage height, 0.47 ft (0.143 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8,540 ft^3/s (242 m^3/s) Apr. 16, gage height, 6.42 ft (1.957 m); minimum, 292 ft^3/s (8.27 m^3/s) July 25, Aug. 9, gage height, 0.88 ft (0.268 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2650	1580	2770	1900	3030	760	6070	2990	941	544	404	677
2	4210	1390	4750	1800	2760	740	7230	2690	1280	539	495	670
3	5350	1330	5350	1700	2510	740	7800	2260	1350	627	644	557
4	5750	1390	5130	1700	2170	738	7740	2060	1170	646	632	494
5	5730	1780	4560	1600	2000	754	7380	2010	946	557	609	441
6	5360	2590	3740	1600	1840	720	7210	1760	1000	462	579	387
7	4600	2940	3140	1700	1760	687	7570	1560	912	418	454	390
8	3810	3080	2400	1740	1660	669	8070	1540	940	403	377	530
9	3350	3090	2300	4340	1600	686	8060	1630	1030	421	315	474
10	3570	2910	2200	7400	1550	720	7370	1960	1050	415	358	377
11	3660	3060	2200	7640	1500	760	6410	2090	1070	728	363	438
12	3490	3790	2160	6400	1400	800	6750	2040	1020	1060	377	468
13	3170	4070	2200	5400	1300	840	7400	2160	854	852	423	664
14	2820	3840	2350	4900	1300	984	8020	1930	1010	873	469	1350
15	2530	3370	2960	4510	1200	1820	8400	1620	998	972	419	1630
16	2360	3020	3910	3920	1200	2440	8490	1430	1270	975	539	1580
17	2690	3180	4640	3290	1100	2980	7820	1380	1380	821	799	1380
18	4050	3700	5490	2850	1000	2750	6400	1370	1240	904	927	1140
19	4760	4040	5210	2520	980	2410	5310	1350	1020	804	812	919
20	4960	3930	4720	2200	940	2180	4890	1440	844	760	920	965
21	4690	3890	4170	2000	920	2230	5250	1470	1120	658	849	749
22	4220	3800	3570	1900	880	3760	5620	1490	1190	572	801	717
23	3760	3710	2960	1910	860	5040	5670	1350	1120	496	881	772
24	3280	3850	2640	1890	820	5500	5390	1410	1060	360	858	751
25	2920	3900	2500	1960	800	5360	4820	1380	957	321	827	727
26	2630	3730	2400	2090	800	4640	4420	1220	786	321	901	660
27	2350	3450	2300	2660	780	3890	4150	1110	684	343	697	720
28	2140	3290	2200	3190	760	4030	3940	891	653	373	637	745
29	2020	3020	2100	3590	---	4960	3790	951	629	390	558	696
30	1850	2580	2000	3550	---	5420	3290	818	550	422	644	590
31	1720	---	1900	3400	---	5630	---	794	---	434	653	---
TOTAL	110450	93300	100920	97250	39420	76038	190730	50154	30074	18471	19221	22658
MEAN	3563	3110	3255	3137	1408	2453	6358	1618	1002	596	620	755
MAX	5750	4070	5490	7640	3030	5630	8490	2990	1380	1060	927	1630
MIN	1720	1330	1900	1600	760	669	3290	794	550	321	315	377

CAL YR 1977 TOTAL 856496 MEAN 2347 MAX 15700 MIN 359
WTR YR 1978 TOTAL 848686 MEAN 2325 MAX 8490 MIN 315

04263000 OSWEGATCHIE RIVER NEAR HEUVELTON, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1960, 1966-69, 1971-72, and current year.
CHEMICAL DATA: 1960 (a), 1966 (b), 1968-69 (d), 1971-72 (a), 1978 (c).
MINOR ELEMENTS DATA: 1978 (b).
ORGANIC DATA: TOC--1978 (b).
NUTRIENT DATA: 1978 (c).
BIOLOGICAL DATA:
Coliform bacteria--1978 (c).
Phytoplankton--1978 (c).
Periphyton--1978 (b).
SEDIMENT DATA: 1978 (c).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: January to September 1978.
WATER TEMPERATURES: January to September 1978.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum daily, 152 micromhos Mar. 5; minimum daily, 63 micromhos Apr. 16.
WATER TEMPERATURES: Maximum daily, 28.0°C July 28; minimum daily, freezing point on many days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	PH (UNITS)	TUR-BID-ITY (JTU)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
FEB												
09...	1300	1640	7.4	2	--	11.2	79	230	78	51	19	15
MAR												
06...	1230	759	7.1	3	--	12.0	83	340	210	57	20	16
APR												
05...	1100	7380	6.8	4	--	9.6	68	340	270	40	9	11
24...	1045	5410	7.2	3	--	9.4	79	153	K10	28	11	7.9
JUN												
07...	1200	920	7.5	3	--	7.6	87	24	K8	33	18	9.5
JUL												
10...	1030	420	6.9	--	1.0	8.2	99	800	26	39	10	11
AUG												
07...	1230	484	7.3	--	2.0	8.6	104	K53	K2	41	21	12
SEP												
13...	1200	645	7.1	--	1.0	10.0	105	K17	K4	47	25	14

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)
FEB											
09...	3.4	2.4	.9	39	0	32	16	2.0	.1	7.7	81
MAR											
06...	4.1	2.8	1.0	45	0	37	18	2.5	.1	8.5	82
APR											
05...	3.1	1.7	1.0	38	0	31	10	2.2	.1	5.0	51
24...	1.9	1.4	.7	20	0	16	10	.1	.1	3.9	50
JUN											
07...	2.2	2.6	.9	18	0	15	14	3.5	.2	3.6	66
JUL											
10...	2.7	3.0	.8	--	--	17	16	2.6	.2	2.8	561
AUG											
07...	2.7	3.4	1.0	--	--	20	18	2.9	.1	4.2	71
SEP											
13...	3.0	3.6	.7	--	--	22	21	3.1	.1	4.5	78

K Results based on colony count outside the acceptable range (non-ideal colony count).

04263000 OSWEGATCHIE RIVER NEAR HEUVELTON, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)
FEB 09...	67	.30	--	--	.38	--	.68	.03	.01	--	--
MAR 06...	75	.36	.16	.22	.38	.36	.74	.02	.01	--	--
APR 05...	53	.28	.09	.37	.46	.40	.74	.01	.00	--	--
24...	36	.23	.00	.21	.21	.32	.44	.01	.00	1	0
JUN 07...	45	.19	.01	.29	.30	.28	.49	.02	.01	--	--
JUL 10...	59	.09	.01	.28	.29	.35	.38	.02	.01	1	1
AUG 07...	56	.22	.00	.46	.46	.44	.68	.00	.01	--	--
SEP 13...	63	.09	.01	.42	.43	.64	.52	.00	.00	1	0

DATE	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)
FEB 09...	--	--	--	--	--	--	--	--	--	--	--
MAR 06...	--	--	--	--	--	--	--	--	--	--	--
APR 05...	--	--	--	--	--	--	--	--	--	--	--
24...	0	0	2	2	10	1	0	0	6	5	330
JUN 07...	--	--	--	--	--	--	--	--	--	--	--
JUL 10...	0	0	0	0	20	1	0	3	2	1	350
AUG 07...	--	--	--	--	--	--	--	--	--	--	--
SEP 13...	0	0	4	4	<10	0	1	1	2	2	280

DATE	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)
FEB 09...	--	--	--	--	--	--	--	--	--	--	--
MAR 06...	--	--	--	--	--	--	--	--	--	--	--
APR 05...	--	--	--	--	--	--	--	--	--	--	--
24...	110	4	7	20	20	<.5	<.5	0	0	0	0
JUN 07...	--	--	--	--	--	--	--	--	--	--	--
JUL 10...	210	27	3	30	20	.5	.5	0	0	0	0
AUG 07...	--	--	--	--	--	--	--	--	--	--	--
SEP 13...	190	2	0	20	10	<.5	<.5	0	0	0	0

04263000 OSWEGATCHIE RIVER NEAR HEUVELTON, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C)
FEB					
09...	--	--	4.6	--	--
MAR					
06...	--	--	6.9	--	--
APR					
24...	30	20	--	4.2	.3
MAY					
08...	--	--	7.5	--	--
JUN					
07...	--	--	7.9	--	--
JUL					
10...	20	10	--	7.4	--
AUG					
07...	--	--	3.3	--	--
SEP					
13...	10	10	--	10	.5

SUSPENDED-SEDIMENT MEASUREMENTS, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDED (T/DAY)
FEB				
09...	1300	1640	4	18
MAR				
06...	1230	759	8	16
APR				
05...	1100	7380	18	359
24...	1045	5410	8	117
MAY				
08...	1145	1590	5	21
JUN				
07...	1200	920	13	32
JUL				
10...	1030	420	10	11
AUG				
07...	1230	484	15	20
SEP				
13...	1200	645	2	3.5

04263000 OSWEGATCHIE RIVER NEAR HEUVELTON, NY--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

PHYTOPLANKTON

DATE	MAR 6.78	MAY 8.78	JUN 7.78
TIME	1230	1145	1200
TOTAL CELLS/ML	37	250	1000
DIVERSITY: DIVISION	0.0	0.8	0.9
.CLASS	0.0	0.8	0.9
..ORDER	0.0	0.8	2.0
...FAMILY	1.9	2.3	2.7
....GENUS	1.9	2.3	2.7

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)						
.CHLOROPHYCEAE						
..CHLOROCOCCALES						
...MICRACTINIACEAE						
....MICRACTINIUM	--	-	--	-	120	12
...SCENEDESMACEAE						
....CRUCIGENIA	--	-	--	-	120	12
..TETRASPORALES						
...PALMELLACEAE						
....SPHAEROCYSTIS	--	-	--	-	350#	35
..VOLVOCALES						
...CHLAMYDOMONADACEAE						
....CHLAMYDOMONAS	--	-	57#	23	--	-
..ZYGNEMATALES						
...DESMIDIACEAE						
....COSMARIUM	--	-	--	-	59	6
CHRYSOPHYTA						
.BACILLARIOPHYCEAE						
..CENTRALES						
...COSCINODISCACEAE						
....CYCLOTELLA	--	-	--	-	59	6
..PENNALES						
...ACHNANTHACEAE						
....ACHNANTHES	--	-	--	-	120	12
...CYMBELLACEAE						
....CYMBELLA	7#	20	76#	31	--	-
...DIATOMACEAE						
....DIATOMA	--	-	38#	15	--	-
...GOMPHONEMATACEAE						
....GOMPHONEMA	7#	20	--	-	--	-
...NAVICULACEAE						
....NAVICULA	15#	40	38#	15	120	12
...NITZSCHIACEAE						
....NITZSCHIA	7#	20	38#	15	59	6

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

PERIPHYTON

Dates of exposure	Length of exposure (days)	Biomass (g/m^2) Dry weight	Biomass (g/m^2) Ash weight	Chlorophyll a (mg/m^2)	Chlorophyll b (mg/m^2)	Sampling method
June 7 to July 10	33	0.866	0.472	6.65	1.65	Polyethylene strip
July 10 to Aug. 7	28	7.80	6.46	41.2	.430	Polyethylene strip
Aug. 7 to Sept. 13	37	7.95	6.30	4.10	.770	Polyethylene strip
Sept. 13 to Oct. 10	27	.551	.403	.470	.000	Polyethylene strip

04263000 OSWEGATCHIE RIVER NEAR HEUVELTON, NY--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1				---	114	136	138	71	104	87	86	116
2				---	113	138	142	71	102	87	102	118
3				---	113	144	144	71	102	89	102	114
4				---	116	---	142	75	103	89	102	112
5				---	120	152	98	76	104	92	102	114
6				---	122	150	101	79	99	95	104	114
7				---	118	142	96	---	92	95	112	126
8				---	116	142	95	83	86	98	102	130
9				---	120	138	90	84	86	100	104	120
10				---	112	138	90	87	86	120	102	114
11				---	112	140	92	92	91	104	100	114
12				---	112	140	93	91	87	102	98	112
13				---	112	140	95	90	93	104	98	110
14				---	114	144	80	90	91	108	97	92
15				---	116	148	68	92	91	108	102	110
16				112	118	150	63	87	90	100	102	110
17				112	116	150	65	93	91	83	106	87
18				112	114	148	71	95	93	83	106	87
19				114	---	150	73	100	100	83	104	84
20				116	116	146	---	103	90	81	106	85
21				112	118	150	79	108	91	80	110	84
22				112	122	142	79	102	90	79	106	87
23				114	122	138	79	107	88	79	140	88
24				116	122	130	78	110	89	80	---	90
25				116	126	124	73	106	93	79	122	89
26				120	126	125	77	106	92	80	122	85
27				118	126	130	72	104	102	85	132	86
28				122	136	132	68	102	93	79	132	91
29				122	---	110	68	104	89	83	120	91
30				122	---	112	70	101	90	80	114	92
31				142	---	110	---	102	---	84	112	---
MEAN				118	118	138	89	93	93	90	108	102

WTR YR 1978 MEAN 105 MAX 152 MIN 63

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1				---	1.0	1.0	1.0	11.0	25.0	24.0	22.0	21.0
2				---	1.0	2.0	1.0	9.0	25.0	24.0	23.0	21.0
3				---	1.0	2.0	1.0	9.0	24.5	24.0	23.0	21.0
4				---	.0	---	1.0	9.0	23.0	24.0	24.0	21.0
5				---	.0	2.0	1.5	9.0	22.0	24.0	24.0	22.0
6				---	.0	2.0	1.5	10.0	21.0	24.0	24.0	22.0
7				---	.0	.5	2.0	---	22.0	24.0	25.0	22.0
8				---	.0	.5	3.0	11.0	20.0	24.0	24.0	21.0
9				---	1.0	.5	3.0	12.0	21.0	24.0	24.0	20.0
10				---	.0	.5	3.5	13.0	21.0	24.0	24.0	19.0
11				---	.0	.5	4.0	13.5	21.0	24.0	24.0	19.0
12				---	.0	.5	4.0	14.0	21.0	24.0	24.0	18.0
13				---	1.0	.5	4.0	14.5	22.0	24.0	24.0	18.0
14				---	.0	.5	4.5	15.0	21.0	24.0	24.0	18.0
15				---	1.0	.5	5.0	15.0	21.0	25.0	24.0	18.0
16				.0	.0	.5	6.0	15.0	21.0	25.0	25.0	18.0
17				.0	1.0	.5	6.0	15.0	22.0	25.0	25.0	17.0
18				.0	1.0	.5	6.0	15.0	22.0	25.0	25.0	16.0
19				.0	---	.5	6.0	16.5	22.0	25.0	25.0	16.0
20				.0	1.0	.5	---	17.0	21.0	25.0	25.0	16.0
21				.0	1.0	1.0	6.5	17.5	21.0	26.0	24.0	17.0
22				.0	1.0	1.0	7.0	18.0	21.0	26.0	24.0	17.0
23				.0	1.0	1.0	7.0	18.0	21.0	26.0	23.0	17.0
24				.0	1.0	1.0	9.0	18.0	21.0	26.0	---	17.0
25				1.0	2.0	1.0	12.0	18.5	23.0	26.0	24.0	16.0
26				1.0	2.0	1.0	12.0	19.0	23.0	26.0	24.0	15.0
27				1.0	3.0	1.0	12.0	20.0	23.0	26.0	22.0	15.0
28				1.0	2.0	1.0	12.5	22.0	24.0	28.0	21.0	15.0
29				1.0	---	1.0	13.0	23.0	24.0	24.0	21.0	14.0
30				1.0	---	1.0	13.0	25.0	24.0	24.0	21.0	14.0
31				1.0	---	1.0	---	26.0	---	24.0	21.0	---
MEAN				.5	1.0	1.0	6.0	15.5	22.0	25.0	23.5	18.0

WTR YR 1978 MEAN 13.5 MAX 28.0 MIN .0

04264050 ST. LAWRENCE RIVER NEAR WADDINGTON, NY

LOCATION.--Lat 44°51'27", long 75°14'46", St. Lawrence County, Hydrologic Unit 04150301, on right bank at Leishman Point, 2.1 mi (3.4 km) west of Waddington, 2.5 mi (4.0 km) upstream from Sucker Brook, and 3.3 mi (5.3 km) downstream from Iroquois Dam.

DRAINAGE AREA.--298,500 mi² (773,100 km²).

PERIOD OF RECORD.--January 1976 to November 1976, November 1977 to current year.

GAGE.--Water-stage recorder. Datum of gage is International Great Lakes Datum.

REMARKS.--Flow regulated by international agreement administered by International St. Lawrence River Board of control under the International Joint Commission. Records do not include water diverted from Lake Michigan by Chicago Sanitary and Ship Canal, operation of which began in 1900. Records include water diverted into Lake Superior from Hudson Bay drainage by the Long Lake Project, operation of which began in July 1939, and by the Ogoki Project, operation of which began in July 1943.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily elevation, 244.80 ft (74.615 m) Apr. 6, 1976; minimum daily, 237.09 ft (72.265 m) Feb. 15, 1976.

EXTREMES FOR CURRENT PERIOD.--Maximum elevation during period November 1977 to September 1978, 243.96 ft (74.359 m) Jan. 9; minimum, 237.53 ft (72.399 m) Mar. 14.

ELEVATION, IN FEET ABOVE IGLD, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		240.06	239.37	241.28	238.70	238.03	240.56	242.44	242.05	241.52	241.33	240.60
2		239.79	240.61	241.22	238.58	238.18	240.99	242.39	242.00	241.41	241.27	240.73
3		239.56	240.70	241.77	238.57	238.18	240.97	242.32	242.09	241.25	241.32	240.85
4		239.59	240.34	241.55	238.68	238.27	241.63	242.18	242.04	241.26	241.30	240.68
5		239.13	239.63	241.68	238.71	238.34	242.11	241.96	242.03	241.34	241.37	240.70
6		238.95	238.62	241.07	238.45	238.19	242.18	242.04	242.00	241.38	241.35	240.73
7		239.08	239.32	241.26	238.26	238.03	242.23	242.15	241.95	241.36	241.31	240.66
8		239.25	239.70	242.49	238.46	237.85	242.57	242.11	241.96	241.45	241.31	240.44
9		239.48	240.05	243.47	238.43	237.75	242.53	242.26	241.92	241.63	241.55	240.36
10		239.70	240.31	243.35	238.39	237.72	242.52	242.48	241.96	241.70	241.42	240.25
11		240.31	240.59	242.26	238.46	237.69	242.46	242.34	242.08	241.62	241.26	240.40
12		240.47	241.58	241.53	238.61	237.67	242.95	242.12	242.10	241.67	241.18	240.30
13		239.85	241.58	240.80	238.42	237.66	243.07	242.01	242.14	241.63	241.23	240.10
14		239.86	241.74	240.50	238.30	237.66	243.32	241.84	242.09	241.48	241.26	240.11
15		239.93	242.08	240.85	238.44	238.03	243.03	241.65	242.12	241.52	241.15	240.62
16		240.03	242.30	240.78	238.41	238.04	242.78	241.64	241.98	241.55	241.22	240.74
17		240.02	242.03	240.16	238.44	237.98	242.69	241.76	241.88	241.38	241.46	240.34
18		240.10	241.66	239.25	238.47	238.27	242.52	241.99	242.00	241.38	241.32	239.98
19		240.20	241.83	239.12	238.54	238.50	242.22	242.19	241.95	241.41	241.14	239.72
20		240.20	241.98	238.78	238.56	238.52	242.02	242.26	241.96	241.40	241.21	240.14
21		240.10	242.32	238.72	238.46	238.57	242.66	242.20	241.82	241.39	241.03	240.38
22		240.00	242.94	238.86	238.49	238.62	242.98	242.21	241.88	241.47	241.06	240.29
23		240.00	243.29	238.84	238.44	238.88	242.95	242.10	241.91	241.69	241.06	240.17
24		239.90	242.98	238.72	238.34	239.20	242.82	241.96	241.85	241.56	240.64	240.28
25		239.90	243.27	238.68	238.12	239.41	242.58	241.98	241.84	241.46	240.44	240.30
26		239.80	243.36	238.75	238.09	239.21	242.35	241.99	241.67	241.54	240.75	240.13
27		239.70	243.22	239.46	238.12	239.35	242.26	242.02	241.70	241.71	240.71	240.32
28		239.70	243.12	239.38	238.08	239.90	242.25	242.07	241.76	241.70	240.59	240.23
29		239.68	242.67	239.15	---	239.96	242.32	242.07	241.74	241.52	241.02	240.16
30		239.55	242.17	238.95	---	240.10	242.27	242.02	241.62	241.27	241.01	240.18
31		---	241.69	238.68	---	240.33	---	242.06	---	241.20	240.76	---
MEAN		239.80	241.52	240.37	238.43	238.52	242.36	242.09	241.94	241.48	241.13	240.36
MAX		240.47	243.36	243.47	238.71	240.33	243.32	242.48	242.14	241.71	241.55	240.85
MIN		238.95	238.62	238.68	238.08	237.66	240.56	241.64	241.62	241.20	240.44	239.72

04264331 ST. LAWRENCE RIVER AT CORNWALL, ONTARIO--NEAR MASSENA, NY
(National stream-quality accounting network station)

LOCATION.--Lat 45°00'22", long 74°47'43", Stormont County, Ontario--St. Lawrence County, N.Y., Hydrologic Unit 04150301, at Robert Moses-Robert H. Saunders power dam on Lake St. Lawrence at the International Boundary at Cornwall, Ontario, 2.9 mi (4.7 km) upstream from Grass River, 6.2 mi (10.0 km) upstream from Raquette River, and 5.9 mi (9.5 km) northeast of Massena, N.Y.. Water-quality samples collected at power dam from taps at generators 17 and 30.

DRAINAGE AREA.--298,800 mi^2 773,890 km^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1860 to current year. Monthly discharges only for some periods published in WSP 1307. Prior to October 1971 published as 04264000 "St. Lawrence River at Ogdensburg."

REVISED RECORDS.--WSP 1437: 1870, 1874, 1881, 1883, 1890.

GAGE.--There is no gage. Discharge is determined from summation of discharge through the Robert Moses-Robert H. Saunders power dam, the Long Sault Dam, the Massena Diversion, the Rasin River Diversion, the Cornwall and Massena municipal water supply, and the Cornwall and the Wiley-Dondero navigation canals. U.S.-Canada coordinated discharge figures supplied by Corps of Engineers. Prior to 1956, base gage at lock 25 at Iroquois Ont. with supplementary gages. August 1956 to June 1958, base gage at lock 24 between Iroquois and Morrisburg, Ont., and supplementary gages. Prior to Aug. 1956, these were gages of the Canadian Hydrographic Service and from August 1956 to June 1958, were gages of the Hydro-Electric Power Commission of Ontario. Discharge in the reach of river at Cornwall, Ont.--near Massena, N.Y. is considered to be the same as discharge at Ogdensburg, N.Y. when adjusted for storage in Lake St. Lawrence.

REMARKS.--Since July 1958, flow regulated by international agreement administered by International St. Lawrence River Board of Control under the International Joint Commission. Records do not include water diverted from Lake Michigan by Illinois and Michigan Canal during period of its operation prior to 1910 and by Chicago Sanitary and Ship Canal, which began operation in 1900. Records include water diverted into Lake Superior from Hudson Bay drainage by the Long Lake Project, which began operation in July 1939, and by the Ogoki project, which began operation in July 1943.

COOPERATION.--Records of daily discharge furnished by Detroit District, Corps of Engineers through International St. Lawrence River Board of Control.

AVERAGE DISCHARGE.--118 years (1860-1978), 242,100 ft^3/s (6,856 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 352,000 ft^3/s (9,969 m^3/s) June 22, 1976; minimum daily, 139,000 ft^3/s (3,940 m^3/s) Feb. 7, 1936. Maximum monthly discharge, 350,000 ft^3/s (9,910 m^3/s) July 1973; minimum monthly, 154,000 ft^3/s (4,360 m^3/s) Feb. 1936.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 321,000 ft^3/s (9,091 m^3/s) Mar. 29, 31, Apr. 1, 2; minimum daily, 210,000 ft^3/s (5,947 m^3/s) Jan. 8, 9, 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	296000	282000	299000	280000	277000	295000	321000	311000	313000	304000	282000	278000
2	296000	298000	299000	280000	279000	295000	321000	311000	313000	305000	282000	276000
3	298000	297000	297000	280000	277000	295000	292000	311000	313000	304000	282000	276000
4	301000	299000	297000	277000	277000	295000	280000	311000	313000	304000	282000	276000
5	301000	297000	297000	265000	279000	298000	280000	311000	313000	304000	277000	276000
6	301000	297000	296000	281000	280000	300000	280000	313000	313000	304000	277000	276000
7	301000	289000	298000	227000	274000	300000	280000	313000	313000	304000	277000	276000
8	305000	286000	297000	210000	276000	300000	280000	313000	313000	293000	277000	275000
9	305000	294000	297000	210000	280000	298000	280000	313000	313000	293000	277000	273000
10	305000	294000	297000	215000	280000	295000	279000	313000	307000	294000	277000	273000
11	304000	297000	250000	229000	280000	295000	281000	313000	307000	292000	277000	273000
12	303000	297000	230000	235000	283000	295000	280000	313000	307000	293000	278000	273000
13	302000	297000	231000	235000	285000	295000	280000	313000	307000	293000	278000	273000
14	303000	297000	229000	210000	282000	292000	280000	313000	307000	293000	278000	273000
15	301000	297000	230000	217000	283000	290000	290000	313000	307000	287000	278000	273000
16	301000	297000	230000	234000	285000	290000	290000	314000	307000	287000	278000	273000
17	301000	297000	230000	250000	285000	290000	291000	314000	307000	287000	278000	273000
18	301000	297000	230000	250000	285000	290000	295000	316000	307000	287000	278000	273000
19	301000	298000	230000	245000	285000	290000	297000	316000	307000	287000	278000	273000
20	301000	298000	230000	245000	288000	291000	297000	320000	307000	287000	278000	273000
21	301000	298000	229000	245000	290000	290000	288000	320000	307000	287000	278000	273000
22	300000	298000	230000	246000	293000	290000	288000	320000	307000	281000	278000	273000
23	300000	298000	231000	252000	295000	295000	293000	320000	307000	281000	278000	274000
24	300000	298000	233000	255000	295000	301000	298000	320000	304000	281000	278000	274000
25	300000	298000	233000	255000	295000	306000	305000	320000	304000	281000	278000	274000
26	300000	298000	233000	255000	295000	310000	308000	320000	304000	281000	278000	274000
27	300000	300000	233000	258000	295000	311000	309000	313000	304000	281000	278000	274000
28	282000	299000	238000	265000	295000	316000	311000	313000	304000	281000	278000	274000
29	298000	299000	263000	271000	---	321000	311000	313000	304000	282000	278000	274000
30	298000	299000	272000	278000	---	320000	311000	313000	304000	282000	278000	269000
31	280000	---	280000	279000	---	321000	---	315000	---	282000	278000	---
TOTAL	9286000	8890000	7969000	7734000	7973000	9270000	8796000	9752000	9243000	9002000	8627000	8218000
MEAN	299500	296300	257100	249500	284800	299000	293200	314600	308100	290400	278300	273900
MAX	305000	300000	299000	281000	295000	321000	321000	320000	313000	305000	282000	278000
MIN	280000	282000	229000	210000	274000	290000	279000	311000	304000	281000	277000	269000

CAL YR 1977 TOTAL 95609000 MEAN 261900 MAX 305000 MIN 200000
WTR YR 1978 TOTAL 104760000 MEAN 287000 MAX 321000 MIN 210000

04264331 ST. LAWRENCE RIVER AT CORNWALL, ONTARIO--NEAR MASSENA, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1955, 1966 to current year. Prior to October 1970, published as "near Massena, NY."
CHEMICAL DATA: 1955 (a), 1974 (c), 1975-78 (d).
MINOR ELEMENTS DATA: 1974-77 (b), 1978 (a).
RADIOLOGICAL DATA: 1974-78 (a).
ORGANIC DATA: TOC--1974 (a), 1975 (b), 1977 (b), 1978 (d).
NUTRIENT DATA: 1974-75 (c), 1976-78 (d).
BIOLOGICAL DATA:
Coliform bacteria--1974 (c), 1975-78 (d).
Phytoplankton--1974 (a), 1975-77 (d), 1978 (c).
Periphyton--1974 (a), 1975 (c), 1976-78 (b).
SEDIMENT DATA: 1975 (d), 1976-77 (c), 1978 (d).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1975 to current year.
WATER TEMPERATURES: October 1955 to October 1958, unpublished; January 1966 to current year.

REMARKS.--Temperature measurements made approximately 68 ft (21 m) below normal forebay level. Temperature measurements from October 1955 to October 1958 made at Aluminum Company of America Massena Canal power station.

COOPERATION.--Water-temperature record furnished by the Power Authority of the State of New York.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 400 micromhos Aug. 7, 1978; minimum daily, 270 micromhos Apr. 18-20, 1977.
WATER TEMPERATURES: Maximum daily, 24.5°C on several days in August and September 1973 and August 1975; minimum daily, freezing point on many days during winter periods except 1972-74.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum daily, 400 micromhos Aug. 7; minimum daily, 300 micromhos Mar. 29, May 26.
WATER TEMPERATURES: Maximum daily, 23.0°C Aug. 16-24; minimum daily, 0.0°C on several days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAMFLOW (CFS)	PH (UNITS)	TURBIDITY (JTU)	TURBIDITY (NTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
OCT												
27...	1030	300000	7.9	1	--	10.2	94	K6	26	130	47	38
DEC												
27...	1000	233000	7.6	2	--	11.8	89	K10	K10	130	44	41
JAN												
26...	1030	225000	7.5	2	--	10.8	76	K6	K12	130	40	39
FEB												
23...	1000	295000	7.2	1	--	10.8	76	K1	K3	130	50	40
MAR												
29...	0930	320000	7.4	1	--	9.2	63	K13	29	130	39	39
APR												
26...	1000	308000	7.7	1	--	9.5	74	44	K1	130	43	38
MAY												
25...	1045	320000	7.8	2	--	8.5	80	K3	K1	120	41	38
JUN												
28...	1000	304000	7.9	--	1.0	7.8	81	--	31	130	33	40
JUL												
26...	1015	281000	7.8	--	1.0	8.2	96	K14	K3	130	39	38
SEP												
25...	1000	274000	8.1	--	1.0	9.6	94	K9	K2	130	49	39

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)
OCT												
27...	8.2	13	1.5	100	0	82	27	27	.1	.3	<1	197
DEC												
27...	7.8	13	1.6	110	0	90	28	26	.1	.3	--	176
JAN												
26...	8.0	14	1.7	110	0	90	28	27	.1	.4	--	188
FEB												
23...	7.8	13	1.5	100	0	82	30	27	.1	.5	1	200
MAR												
29...	7.8	12	1.7	110	0	90	29	26	.1	.6	--	170
APR												
26...	7.4	12	1.5	100	0	82	27	24	.1	.2	--	173
MAY												
25...	6.8	11	1.7	100	0	82	26	25	.1	.5	--	190
JUN												
28...	7.6	13	1.7	--	--	98	23	27	.1	.1	--	197
JUL												
26...	8.0	13	1.5	--	--	89	28	27	.1	.4	--	187
SEP												
25...	8.9	12	1.5	--	--	85	30	29	.1	.5	--	189

K Results based on colony count outside the acceptable range (non-ideal colony count).

04264331 ST. LAWRENCE RIVER AT CORNWALL, ONTARIO--NEAR MASSENA, NY--Continued

WATER QUALITY DATA, WATER OCTOBER 1977 TO SEPTEMBER 1978

DATE	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)
OCT 27...	164	.17	--	--	.26	--	.43	.02	--	--	--
DEC 27...	172	.25	--	--	.33	--	.58	.02	--	--	--
JAN 26...	172	.24	--	--	.27	--	.51	.01	--	--	--
FEB 23...	169	.20	.01	.16	.17	.24	.37	.02	.01	0	0
MAR 29...	170	.30	.00	.24	.24	.30	.54	.01	.02	--	--
APR 26...	160	.41	.00	.26	.26	.24	.67	.01	.00	--	--
MAY 25...	158	.27	.00	.31	.31	.28	.58	.01	.00	--	--
JUN 28...	171	.16	.03	.27	.30	.14	.46	.01	.00	1	1
JUL 26...	170	.13	.05	.46	.51	.35	.64	.03	.01	--	--
SEP 25...	172	.10	.01	.23	.24	.10	.34	.01	.01	--	--

DATE	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	BARIUM, DISSOLVED (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)
OCT 27...	--	--	--	--	--	--	--	--	--	--	--
DEC 27...	--	--	--	--	--	--	--	--	--	--	--
JAN 26...	--	--	--	--	--	--	--	--	--	--	--
FEB 23...	0	0	0	0	<10	0	0	0	4	2	50
MAR 29...	--	--	--	--	--	--	--	--	--	--	--
APR 26...	--	--	--	--	--	--	--	--	--	--	--
MAY 25...	--	--	--	--	--	--	--	--	--	--	--
JUN 28...	0	0	0	0	10	0	0	0	4	2	90
JUL 26...	--	--	--	--	--	--	--	--	--	--	--
SEP 25...	--	--	--	--	--	--	--	--	--	--	--

DATE	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	SILVER, DISSOLVED (UG/L AS AG)
OCT 27...	--	--	--	--	--	--	--	--	--	--	--
DEC 27...	--	--	--	--	--	--	--	--	--	--	--
JAN 26...	--	--	--	--	--	--	--	--	--	--	--
FEB 23...	30	0	0	0	0	<.5	<.5	0	0	1	0
MAR 29...	--	--	--	--	--	--	--	--	--	--	--
APR 26...	--	--	--	--	--	--	--	--	--	--	--
MAY 25...	--	--	--	--	--	--	--	--	--	--	--
JUN 28...	0	10	4	0	0	<.5	<.5	0	0	0	0
JUL 26...	--	--	--	--	--	--	--	--	--	--	--
SEP 25...	--	--	--	--	--	--	--	--	--	--	--

04264331 ST. LAWRENCE RIVER AT CORNWALL, ONTARIO--NEAR MASSENA, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)
OCT					
27...	--	--	4.2	--	--
NOV					
28...	20	10	--	7.0	--
DEC					
27...	--	--	9.7	--	--
JAN					
26...	--	--	1.6	--	--
FEB					
23...	10	10	--	3.5	.8
MAR					
29...	--	--	6.1	--	--
APR					
26...	--	--	9.7	--	--
MAY					
25...	--	--	8.3	--	--
JUN					
28...	30	10	--	--	--
JUL					
26...	--	--	3.2	--	--
AUG					
28...	--	--	2.9	--	--
SEP					
25...	--	--	2.0	--	--

DATE	GROSS ALPHA, DIS-SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	RADIUM 226, DIS-SOLVED, RADON METHOD (PCI/L)	URANIUM DIS-SOLVED, EXTRAC-TION (UG/L)
OCT								
27...	<2.1	<.4	6.3	<.4	5.5	<.4	.06	.22
FEB								
23...	<3.4	<.4	5.1	<.4	4.4	<.4	.03	.28

SUSPENDED-SEDIMENT MEASUREMENTS, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
OCT				
27...	1030	300000	1	810
NOV				
28...	1030	298000	4	3220
DEC				
27...	1000	233000	5	3150
JAN				
26...	1030	225000	13	7900
FEB				
23...	1000	295000	4	3190
MAR				
29...	0930	320000	7	6050
APR				
26...	1000	308000	3	2500
MAY				
25...	1045	320000	6	5180
JUN				
28...	1000	304000	13	10700
JUL				
26...	1015	281000	8	6070
AUG				
28...	1030	278000	4	3000
SEP				
25...	1000	274000	2	1480

04264331 ST. LAWRENCE RIVER AT CORNWALL, ONTARIO--NEAR MASSENA, NY--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

PHYTOPLANKTON

DATE	NOV 28.77	MAR 29.78	MAY 25.78
TIME	1030	0930	1045
TOTAL CELLS/ML	460	1500	890
DIVERSITY: DIVISION	0.6	1.6	0.6
.CLASS	0.6	1.6	0.6
..ORDER	1.6	2.2	1.1
...FAMILY	1.9	2.5	1.8
....GENUS	2.5	2.9	2.3

ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CHLOROPHYTA (GREEN ALGAE)						
.CHLOROPHYCEAE						
..CHLOROCOCCALES						
...HYDRODICTYACEAE						
....PEDIASTRUM	--	-	*	0	--	-
...OOCYSTACEAE						
....ANKISTRODESMUS	43	9	100	7	220#	25
....KIRCHNERIELLA	--	-	--	-	160#	17
...SCENEDESMACEAE						
....SCENEDESMUS	--	-	290#	20	310#	35
..VOLVOCALES						
...CHLAMYDOMONADACEAE						
....CHLAMYDOMONAS	--	-	--	-	110	13
..ZYGNEMATALES						
...DESMIDIACEAE						
....CLOSTERIUM	14	3	--	-	--	-
....STAURASTRUM	14	3	--	-	--	-
CHRYSOPHYTA						
.BACILLARIOPHYCEAE						
..CENTRALES						
...COSCINODISCACEAE						
....CYCLOTELLA	140#	31	340#	24	--	-
....MELOSIRA	--	-	170	12	--	-
....STEPHANODISCUS	110#	25	29	2	--	-
..PENNALES						
...ACHNANTHACEAE						
....COCCONEIS	29	6	--	-	--	-
...FRAGILARIACEAE						
....ASTERIONELLA	86#	19	160	11	22	2
...NAVICULACEAE						
....NAVICULA	14	3	--	-	--	-
...SURIRELLACEAE						
....SURIRELLA	--	-	14	1	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)						
.CYANOPHYCEAE						
..CHROOCOCCALES						
...CHROOCOCCACEAE						
....ANACYSTIS	--	-	140	10	67	7
..HORMOGONALES						
...OSCILLATORIACEAE						
....LYNGBYA	--	-	170	12	--	-
PYRRHOPHYTA (FIRE ALGAE)						
.DINOPHYCEAE						
..PERIDINIALES						
...PERIDINIACEAE						
....PERIDINIUM	--	-	43	3	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

PERIPHYTON

Dates of exposure	Length of exposure (days)	Biomass (g/m^2) Dry weight	Biomass (g/m^2) Ash weight	Chlorophyll a (mg/m^2)	Chlorophyll b (mg/m^2)	Sampling method
Oct. 13 to Nov. 12	30	16.6	13.8	1.94	1.09	Polyethylene strip
May 30 to June 29	30	9.45	7.87	1.56	.260	Polyethylene strip
June 29 to July 26	27	38.5	31.7	44.5	2.61	Polyethylene strip
July 26 to Aug. 28	33	37.4	33.0	45.3	6.71	Polyethylene strip
Aug. 28 to Sept. 25	28	5.51	4.17	12.9	3.85	Polyethylene strip

04264331 ST. LAWRENCE RIVER AT CORNWALL, ONTARIO-NEAR MASSENA, NY--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
(ONCE DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	330	330	350	320	340	370	350	360	310	340	380	330
2	340	350	350	330	340	360	350	360	310	330	360	320
3	330	330	350	340	340	360	350	370	310	340	370	320
4	330	350	340	330	350	370	350	360	310	340	390	310
5	340	330	340	330	340	360	340	360	310	340	340	310
6	330	330	350	330	340	370	340	360	320	340	390	320
7	340	330	340	340	---	360	340	360	310	340	400	320
8	340	340	340	---	340	360	340	360	310	340	330	330
9	340	340	340	---	350	350	340	360	310	370	340	320
10	340	340	340	---	340	370	340	370	310	340	330	340
11	340	330	330	330	340	370	330	370	310	340	330	320
12	340	330	---	---	340	360	340	360	310	340	330	340
13	340	340	---	330	340	370	330	370	330	340	330	320
14	340	340	340	---	340	360	330	370	320	340	330	320
15	370	340	---	330	350	360	330	360	320	340	330	320
16	340	340	330	330	340	360	330	360	320	340	330	320
17	340	340	---	330	350	370	330	360	320	340	330	320
18	370	340	340	330	350	370	330	350	330	340	330	320
19	370	340	---	330	360	370	320	350	320	330	330	320
20	---	340	340	330	360	370	320	340	320	340	330	320
21	340	370	340	340	350	370	330	340	320	340	320	320
22	370	340	330	340	350	360	330	350	330	340	330	320
23	330	350	360	330	350	370	320	350	320	330	330	330
24	340	350	340	330	360	370	330	350	320	370	320	340
25	340	370	340	340	360	360	330	340	320	350	320	320
26	330	340	350	350	370	360	330	300	320	330	320	320
27	350	390	350	330	370	350	350	310	320	320	---	310
28	330	350	360	330	370	---	360	310	320	320	310	330
29	340	370	320	330	---	300	360	310	330	330	320	310
30	340	360	330	330	---	340	360	310	340	330	320	310
31	330	---	330	330	---	350	---	310	---	350	310	---
MEAN	342	345	341	332	349	361	338	348	318	339	338	322

WTR YR 1978 MEAN 339 MAX 400 MIN 300

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
(ONCE DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.0	11.0	5.0	.5	.5	.5	.5	5.0	13.0	17.0	22.0	22.0
2	15.5	11.0	5.0	.5	.5	.5	1.0	5.0	13.5	17.0	22.0	22.0
3	15.0	11.0	5.0	.5	.5	.5	1.0	5.0	14.0	18.0	22.0	21.0
4	15.0	11.0	5.0	.5	.5	.5	1.0	5.0	14.0	18.0	22.0	21.0
5	15.0	11.0	---	.5	.5	.5	1.0	5.0	14.0	18.0	22.0	21.0
6	15.0	11.0	4.0	.5	.5	.5	1.0	6.0	14.0	18.0	22.0	20.0
7	15.0	10.5	4.0	.0	.5	1.0	1.0	6.0	14.5	18.5	22.0	20.0
8	14.5	10.5	3.0	.0	.5	1.0	1.0	7.0	15.0	18.5	22.0	20.0
9	14.0	10.5	3.0	.0	.5	1.0	1.0	7.0	15.0	19.0	22.0	20.0
10	13.0	10.5	2.0	.0	.5	1.0	1.5	7.0	15.0	19.0	22.0	20.0
11	13.0	10.5	2.0	.0	.5	1.0	1.0	7.0	15.0	19.0	22.0	20.0
12	12.5	10.5	---	.0	.5	1.0	1.0	7.5	15.0	19.0	22.0	20.0
13	12.5	10.0	---	.0	.5	1.0	1.5	7.5	15.5	19.0	22.0	19.0
14	12.0	9.0	1.0	.0	.5	.5	2.0	7.5	15.5	19.0	22.0	19.0
15	12.0	9.0	---	.0	.5	.5	2.0	8.0	15.0	20.0	22.0	19.0
16	12.0	9.0	1.0	.5	.5	.5	2.0	8.0	15.0	20.5	23.0	19.0
17	11.5	9.0	1.0	.5	.5	.5	2.5	8.0	15.5	20.5	23.0	18.0
18	11.5	9.0	1.0	.5	.5	.5	2.5	8.5	16.0	21.0	23.0	18.0
19	11.0	8.5	---	.5	.5	.5	3.0	8.5	16.0	21.0	23.0	18.0
20	11.0	8.0	1.0	.5	.5	.5	3.0	9.0	16.0	21.0	23.0	17.0
21	11.0	8.0	---	.5	.5	.5	3.0	9.5	16.0	21.0	23.0	17.0
22	11.0	8.0	1.0	.5	.5	.5	3.0	9.5	16.0	22.0	23.0	17.0
23	11.0	8.0	1.0	1.0	.5	.5	3.0	10.5	16.0	22.0	23.0	17.0
24	11.0	7.5	1.0	1.0	.5	.5	3.0	11.0	16.0	22.0	23.0	16.0
25	11.0	7.0	1.0	1.0	.5	.5	3.5	11.0	16.5	22.0	22.0	16.0
26	11.0	7.0	1.0	1.0	.5	.5	4.5	11.0	16.5	22.0	22.0	16.0
27	11.5	6.0	1.0	1.0	.5	.5	4.0	12.0	17.0	22.0	22.0	16.0
28	11.5	5.5	1.0	1.0	.5	.5	4.0	12.0	17.0	22.0	22.0	15.0
29	11.0	5.0	1.0	.5	---	.5	5.0	12.0	17.0	22.0	22.0	15.0
30	11.5	5.0	1.0	.5	---	.5	5.0	13.0	17.0	22.0	22.0	15.0
31	11.0	---	1.0	.5	---	.5	---	13.0	---	22.0	22.0	---
MEAN	12.5	9.0	2.0	.5	.5	.5	2.5	8.5	15.5	20.0	22.5	18.5

WTR YR 1978 MEAN 9.5 MAX 23.0 MIN .0

434608074360200 (042654529) LOST BROOK NEAR RAQUETTE LAKE, NY

LOCATION.--Lat 43°46'08", long 74°36'02", Hamilton County, Hydrologic Unit 04150305, on right bank 0.6 mi (1.0 km) upstream from mouth and Sagamore Lake, 1.3 mi (2.1 km) upstream from Sagamore Lake Outlet, 0.8 mi (1.3 km) downstream from confluence of East Inlet, and 4.0 mi (6.4 km) southeast of Raquette Lake. Water-quality sampling site at discharge station.

DRAINAGE AREA.--17.0 mi² (44.1 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--December 1977 to September 1978.

GAGE.--Water-stage recorder. Altitude of gage is 1,910 ft (582 m), from topographic map.

REMARKS.--Records poor.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period December 1977 to September 1978, 320 ft³/s (9.06 m³/s) May 10, gage height, 7.51 ft (2.289 m); minimum, 2.2 ft³/s (0.062 m³/s) July 25, gage height, 3.13 ft (0.954 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			38	20	32	10	50	86	16	6.5	13	7.2
2			88	18	28	10	70	61	15	5.7	11	6.2
3			94	17	25	10	100	46	14	5.4	12	6.5
4			60	14	23	10	80	46	13	5.0	45	11
5			46	13	21	10	70	58	12	4.6	28	9.4
6			38	13	20	10	90	72	12	4.4	16	8.4
7			34	12	19	10	74	88	14	4.2	11	7.5
8			31	14	18	11	60	115	16	3.9	9.8	6.7
9			29	70	17	11	50	254	18	4.3	8.8	5.9
10			25	200	16	11	42	258	17	4.5	8.2	5.3
11			23	130	15	11	45	155	15	4.0	6.8	15
12			21	90	14	11	120	134	13	3.7	6.6	90
13			21	68	14	11	154	139	17	3.4	7.0	110
14			26	54	13	11	186	169	19	3.4	6.2	45
15			70	44	12	16	117	135	17	3.4	5.2	25
16			94	33	12	25	76	104	14	3.4	5.2	17
17			72	30	12	31	48	108	12	3.6	5.6	14
18			46	28	12	27	41	96	11	3.5	5.4	13
19			38	25	12	22	59	92	15	3.4	5.2	12
20			31	24	11	18	86	80	21	3.3	7.2	11
21			29	25	11	16	92	97	16	3.1	7.6	9.2
22			27	23	11	17	75	100	14	3.1	6.4	8.8
23			26	21	11	35	73	52	13	3.2	6.0	8.4
24			25	20	11	46	81	48	11	3.0	6.8	8.0
25			30	20	11	35	100	37	10	2.8	15	7.6
26			45	22	11	28	118	30	10	2.6	13	7.3
27			35	31	11	30	135	25	9.0	4.6	12	7.0
28			28	41	10	40	149	22	8.4	22	10	7.3
29			25	60	---	60	148	20	7.8	14	9.9	7.9
30			24	54	---	50	121	18	7.3	22	8.8	7.9
31			22	42	---	45	---	17	---	16	7.9	---
TOTAL	---	---	1241	1276	433	688	2710	2762	407.5	180.0	326.6	505.5
MEAN	---	---	40.0	41.2	15.5	22.2	90.3	89.1	13.6	5.81	10.5	16.9
MAX	---	---	94	200	32	60	186	258	21	22	45	110
MIN	---	---	21	12	10	10	41	17	7.3	2.6	5.2	5.3
CFSM	---	---	2.35	2.42	.91	1.30	5.30	5.23	.80	.34	.62	.99
IN.	---	---	2.71	2.79	.95	1.50	5.92	6.03	.89	.39	.71	1.10

434608074360200 (042654529) LOST BROOK NEAR RAQUETTE LAKE, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1977 to August 1978.
MINOR ELEMENTS DATA: 1978 (d).

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	SOLIDS, VOLA-TILE, SUS-PENDED (MG/L)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)
NOV											
04...	0930	62	31	4.7	9.0	--	--	340	12	40	20
DEC											
09...	1400	28	35	5.5	.5	4	--	240	2	50	20
JAN											
24...	1600	30	40	5.0	.0	--	--	1000	0	50	20
FEB											
14...	1200	13	34	5.4	.5	6	--	240	0	30	20
MAR											
06...	1200	10	36	5.8	.5	--	--	320	16	20	40
21...	1000	16	40	5.9	.5	--	--	230	6	20	10
APR											
29...	1300	152	--	--	--	--	--	160	5	70	20
MAY											
01...	1440	90	--	--	--	--	--	190	2	70	20
23...	1320	69	30	4.9	11.5	--	--	240	5	50	20
JUN											
27...	1430	8.0	32	6.3	--	--	--	540	7	20	10
29...	1200	8.4	32	6.4	--	--	--	640	20	20	10
JUL											
24...	1300	3.1	38	6.5	22.0	--	--	2000	5	40	10
AUG											
16...	1530	6.6	35	6.5	--	0	0	1100	13	20	10

434556074374400 (0426545295) SAGAMORE LAKE OUTLET NEAR RAQUETTE LAKE, NY

LOCATION.--Lat 43°45'56", long 74°37'44", Hamilton County, Hydrologic Unit 04150305, on left bank 75 ft (23 m) downstream from bridge on private road at Sagamore Conference Center, 90 ft (27 m) downstream from outlet dam on Sagamore Lake, 0.8 mi (1.3 km) upstream from mouth, and 3.5 mi (5.6 km) southeast of Raquette Lake.

DRAINAGE AREA.--19.1 mi² (49.5 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1977 to September 1978.

GAGE.--Water-stage recorder. Altitude of gage is 1,900 ft (579 m), from topographic map.

REMARKS.--Records good except those for winter periods, which are fair.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 655 ft³/s (18.5 m³/s) May 10, gage height, 5.62 ft (1.713 m); minimum, 5.1 cfs (0.14 m³/s) July 26, 27, gage height, 3.18 ft (0.969 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	130	23	40	22	48	12	46	116	24	9.8	22	10
2	160	22	105	20	38	12	65	81	22	8.9	17	9.2
3	140	21	112	19	32	12	91	64	21	8.7	16	8.7
4	98	23	73	18	29	12	87	58	20	8.2	39	10
5	81	36	54	18	26	12	76	62	19	7.6	45	12
6	64	45	46	17	24	12	86	74	19	7.4	32	12
7	50	43	41	17	22	11	86	89	19	7.1	23	10
8	40	38	36	18	21	11	73	119	20	6.6	18	9.5
9	43	38	34	79	20	11	61	306	23	6.6	14	8.7
10	111	42	31	239	19	11	51	544	23	6.6	13	8.2
11	112	76	29	169	18	11	49	260	21	6.3	12	12
12	75	115	27	118	18	11	91	178	16	6.1	11	122
13	56	77	26	85	17	11	165	166	16	5.9	11	158
14	45	54	28	66	17	12	231	210	23	5.7	11	76
15	41	43	51	51	16	16	179	192	23	5.7	9.8	46
16	45	38	90	41	16	22	106	137	21	5.5	9.5	33
17	87	40	85	35	16	27	74	122	17	5.5	8.9	27
18	258	57	61	32	15	27	61	121	16	5.7	8.7	22
19	160	65	48	28	15	23	67	109	19	6.1	8.2	19
20	109	54	40	27	15	20	90	96	23	5.9	8.7	17
21	82	47	34	26	14	19	111	99	23	5.9	9.2	15
22	66	62	32	24	14	24	100	125	21	5.9	9.5	13
23	57	71	30	22	14	35	88	90	18	5.7	8.9	12
24	49	66	29	21	13	44	93	67	15	5.5	8.7	12
25	43	67	29	21	13	41	114	55	13	5.3	12	11
26	38	63	40	25	13	34	140	47	13	5.1	16	9.8
27	34	51	44	40	12	33	169	41	13	5.7	17	8.9
28	31	43	37	69	12	41	194	36	12	16	15	8.9
29	28	38	30	89	---	56	202	32	11	21	14	8.9
30	26	34	27	80	---	57	165	29	10	27	12	8.9
31	24	---	24	61	---	49	---	26	---	28	11	---
TOTAL	2383	1492	1413	1597	547	729	3211	3751	558	267.0	471.1	738.7
MEAN	76.9	49.7	45.6	51.5	19.5	23.5	107	121	18.6	8.61	15.2	24.6
MAX	258	115	112	239	48	57	231	544	24	28	45	158
MIN	24	21	24	17	12	11	46	26	10	5.1	8.2	8.2
CFSM	4.01	2.59	2.38	2.69	1.02	1.23	5.58	6.31	.97	.45	.79	1.28
IN.	4.62	2.90	2.74	3.10	1.06	1.41	6.23	7.28	1.08	.52	.91	1.43

WTR YR 1978 TOTAL 17157.8 MEAN 47.0 MAX 544 MIN 5.1 CFSM 2.45 IN 33.29

434556074374400 (0426545295) SAGAMORE LAKE OUTLET NEAR RAQUETTE LAKE, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1977 to September 1978.

MINOR ELEMENTS DATA: 1978 (e).

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	SOLIDS, VOLA-TILE, SUS-PENDED (MG/L)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)
NOV											
03...	0800	20	--	--	--	--	--	50	3	10	20
04...	1050	21	32	4.2	9.0	--	--	420	8	70	20
DEC											
02...	0840	94	32	4.7	2.5	8	--	430	3	70	20
JAN											
24...	1745	23	35	4.5	.0	--	--	260	0	70	20
FEB											
14...	1200	E17	33	4.8	.5	0	--	270	0	60	20
MAR											
06...	1345	E12	34	5.5	.5	--	--	280	12	40	20
21...	1700	E19	37	5.9	.5	--	--	250	0	40	0
APR											
10...	1430	48	34	5.5	1.0	--	--	210	36	50	40
13...	0900	123	--	--	--	--	--	240	11	60	20
14...	0900	183	--	--	--	--	--	230	7	60	30
15...	0900	245	--	--	--	--	--	210	9	60	40
26...	0900	140	--	--	--	--	--	220	17	60	20
27...	0900	175	--	--	--	--	--	190	23	60	20
28...	0900	201	--	--	--	--	--	340	10	180	20
29...	0900	213	--	--	--	--	--	110	5	60	20
MAY											
03...	1550	62	32	5.4	4.0	--	--	200	3	60	20
10...	--	E544	--	--	--	--	--	390	4	50	20
12...	--	E178	--	--	--	--	--	320	8	60	30
13...	--	E166	--	--	--	--	--	350	19	60	20
14...	--	E210	--	--	--	--	--	380	8	50	30
16...	1700	131	--	--	--	--	--	580	6	550	30
17...	1400	125	--	--	--	--	--	330	6	190	20
18...	1201	E121	--	--	--	--	--	410	5	250	20
19...	2000	107	--	--	--	--	--	260	6	70	20
20...	1900	97	--	--	--	--	--	340	6	120	20
22...	1900	81	--	--	--	--	--	290	9	50	10
23...	1515	86	30	5.1	11.5	--	--	260	7	50	20
24...	1700	65	--	--	--	--	--	230	3	50	20
25...	1700	53	--	--	--	--	--	170	9	50	20
28...	0700	36	--	--	--	--	--	190	11	50	10
JUN											
27...	1525	12	30	6.6	20.0	--	--	140	7	40	10
29...	1000	11	28	6.0	20.9	--	--	140	11	40	10
AUG											
28...	1125	E15	33	6.1	18.5	0	0	190	10	30	40
30...	1200	E12	34	6.2	15.5	0	0	750	110	10	30
SEP											
14...	1530	E76	31	6.1	16.5	2	0	260	8	50	0
20...	1400	E17	33	5.6	16.0	0	0	220	36	40	20
27...	1330	E8.9	37	6.3	15.0	0	0	190	1	50	20

E Estimated.

434556074374400 (0426545295) SAGAMORE LAKE OUTLET NEAR RAQUETTE LAKE, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

434556074374402 SAGAMORE LAKE OUTLET PRECIPITATION STATION a/

CHEMICAL QUALITY OF PRECIPITATION, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

PERIOD OF COLLECTION	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)
b/ Jan. 24	240	28	20	30
b/ Feb. 14	310	11	20	50
Mar. 6 to Apr. 10	90	50	10	0
Apr. 10 to June 27	10	25	0	10
June 27 to Aug. 16	110	33	30	50
Aug. 16 to Sept. 20	230	18	30	20

a The precipitation collector is located 300 ft (91 m) south of the gage.

b Composite sample of snowcover collected from snow survey course at this station.

04266500 RAQUETTE RIVER AT PIERCEFIELD, NY

LOCATION.--Lat 44°14'05", long 74°34'20", St. Lawrence County, Hydrologic Unit 04150305, on left bank 0.5 mi (0.8 km) downstream from powerplant at Piercefield, and 1.5 mi (2.4 km) upstream from Dead Creek.

DRAINAGE AREA.--722 mi^2 (1,870 km^2).

PERIOD OF RECORD.--August 1908 to current year.

REVISED RECORDS.--WSP 604: 1924. WSP 759: Drainage area. WSP 1387: 1910, 1913, 1914(M), 1916, 1921.

GAGE.--Water-stage recorder. Datum of gage is 1,502.12 ft (457.846 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 22, 1912, nonrecording gage at same site (datum of gage lowered 2 ft or 0.6 m Jan. 1, 1911, to present datum).

REMARKS.--Records good except those for winter periods, which are fair. Seasonal distribution of flow modified by natural storage in lakes and ponds upstream from station and by regulation of Forked Lake, Round Lake, Lows Lake, and Raquette Pond (Tupper Lake) at Setting Pole Dam. Extensive diurnal fluctuation caused by powerplant at Piercefield.

AVERAGE DISCHARGE.--70 years, 1,290 ft^3/s (36.53 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,360 ft^3/s (237 m^3/s) May 8, 1972, gage height, 12.25 ft (3.734 m); minimum daily, 4.1 ft^3/s (0.12 m^3/s) Oct. 12, 1947.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,280 ft^3/s (150 m^3/s) May 1, gage height, 10.09 ft (3.075 m); minimum, 58 ft^3/s (1.64 m^3/s) July 8, gage height, 1.75 ft (0.533 m); minimum daily, 122 ft^3/s (3.45 m^3/s) Sept. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2500	2550	1760	1410	1890	835	1200	5210	2340	371	389	465
2	2820	2360	1820	1400	1850	836	1250	5210	2220	475	371	378
3	3010	2270	1890	1370	1800	809	1340	5050	2120	641	440	369
4	3120	2270	1940	1340	1750	734	1400	4870	1970	385	374	321
5	3150	2300	2000	1330	1710	775	1460	4630	1850	517	508	243
6	3270	2300	2080	1200	1640	821	1520	4360	1700	443	463	136
7	3260	2290	2030	1130	1620	745	1580	4220	1580	415	671	122
8	3270	2270	1980	1190	1590	778	1700	4090	1410	390	518	210
9	3190	2220	1950	1450	1530	772	1760	4020	1300	467	532	192
10	3160	2110	1900	1730	1500	783	1820	4010	1100	705	499	174
11	3300	2160	1840	1850	1450	731	1960	4080	980	663	487	229
12	3190	2210	1760	1990	1420	764	2210	4160	940	560	496	404
13	3240	2170	1700	1980	1380	797	2530	4250	1200	552	578	697
14	3180	2150	1750	1950	1320	780	3000	4280	1230	548	492	647
15	3110	2350	1880	1950	1300	818	3280	4230	1100	378	548	755
16	3080	2360	1990	1950	1240	773	3500	4210	1010	503	462	680
17	3130	2250	2010	1960	1250	816	3710	4180	1020	588	517	711
18	3490	1960	2020	2000	1210	744	3710	4090	1100	509	472	506
19	3720	2010	2000	2000	1150	779	3850	3970	1100	450	429	695
20	3830	2070	1980	1990	1120	763	3990	3830	1000	482	511	697
21	3910	2060	1960	1980	1100	792	4140	3710	1110	423	471	846
22	3920	1950	1930	1940	1000	787	4230	3600	1060	213	466	643
23	3880	1970	1900	1890	1030	823	4310	3490	1050	249	472	637
24	3800	1920	1840	1850	980	767	4350	3340	1020	409	348	625
25	3670	1820	1790	1840	970	863	4550	3200	972	185	433	595
26	3530	1790	1790	1920	940	785	4690	3050	958	257	523	573
27	3320	1760	1690	1970	880	909	4830	2900	795	263	506	610
28	3170	1740	1500	1970	860	948	4950	2730	528	284	529	615
29	3010	1730	1350	1950	---	1020	5110	2620	484	325	478	590
30	2870	1710	1360	1930	---	1080	5150	2640	387	358	475	566
31	2680	---	1410	1900	---	976	---	2520	---	380	466	---
TOTAL	101780	63080	56800	54310	37480	25403	93080	120750	36634	13388	14924	14931
MEAN	3283	2103	1832	1752	1339	819	3103	3895	1221	432	481	498
MAX	3920	2550	2080	2000	1890	1080	5150	5210	2340	705	671	846
MIN	2500	1710	1350	1130	860	731	1200	2520	387	185	348	122

CAL YR 1977 TOTAL 638401 MEAN 1749 MAX 5600 MIN 345
WTR YR 1978 TOTAL 632560 MEAN 1733 MAX 5210 MIN 122

04267500 RAQUETTE RIVER AT SOUTH COLTON, NY

LOCATION.--Lat 44°30'42", long 74°53'00", St. Lawrence County, Hydrologic Unit 04150305, on left bank 300 ft (91 m) upstream from bridge on State Highway 56 at South Colton, 500 ft (152 m) downstream from Niagara Mohawk Power Corp. powerplant, and 0.8 mi (1.3 km) upstream from Cold Brook.

DRAINAGE AREA.--939 mi² (2,432 km²).

PERIOD OF RECORD.--January 1953 to current year.

GAGE.--Water-stage recorder. Datum of gage is 882.05 ft (268.849 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Flow regulated 16 mi (26 km) upstream by Carry Falls Reservoir since 1953; considerable natural storage in large lakes above Piercefield. Large diurnal fluctuation caused by five powerplants.

AVERAGE DISCHARGE.--25 years, 1,751 ft³/s (49.59 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,720 ft³/s (275 m³/s) May 11, 1971, gage height, 9.80 ft (2.987 m); minimum, 1.3 ft³/s (0.037 m³/s) Feb. 1, 1962, Aug. 8, 1964, gage height, 1.53 ft (0.466 m); minimum daily, 4.6 ft³/s (0.13 m³/s) June 2, 1954.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8,240 ft³/s (233 m³/s) Apr. 29, gage height, 9.03 ft (2.752 m); minimum, 15 ft³/s (0.42 m³/s) Sept. 3, 28, 29, 30, gage height, 1.78 ft (0.542 m); minimum daily, 144 ft³/s (4.08 m³/s) Aug. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1760	3770	2650	1450	3430	1820	1680	5350	3180	916	633	1060
2	2800	3320	3270	1550	3460	1520	1710	5480	3120	889	1700	597
3	3380	3170	3190	2250	3350	2010	2010	4760	2210	1170	1540	199
4	3480	3170	3120	1390	3660	1620	1520	4930	2470	710	980	844
5	3600	3370	3170	1690	3650	1480	1790	4590	3080	1330	818	1100
6	3640	3310	3320	1410	3650	2090	1610	4360	2260	1040	399	1170
7	3550	3190	3110	1440	3650	2050	1780	4150	1630	1330	1190	1030
8	3740	3240	3180	1720	3590	1660	1600	3940	2040	1040	1440	1060
9	3890	3330	2910	2380	3500	1560	1400	3980	1520	466	1240	426
10	3850	3390	3430	2350	3320	1700	1610	4430	1130	478	1040	148
11	3660	3670	3310	2700	3400	1480	2340	5100	1240	1020	1210	1390
12	3650	3320	3120	2420	3650	1300	2260	5220	2100	1240	1310	1050
13	3740	3130	3050	2770	3490	1650	2160	5500	2060	1220	1060	1210
14	3740	3320	3070	2670	2800	1900	3480	5070	2360	926	1440	1230
15	3490	3160	3180	2220	2580	1380	2690	4510	2130	590	1830	907
16	3600	3270	3140	3070	2490	1530	2460	4570	2000	472	1850	597
17	3750	3130	2670	2900	2430	1490	3050	4340	1790	971	1500	460
18	4360	2760	3350	2760	2790	1570	2770	4600	1740	1100	1610	1360
19	4210	2950	2830	2760	2130	1440	3080	4870	1460	1130	1690	1240
20	4500	2760	2800	2620	2920	1870	3220	4700	1680	853	144	1490
21	4850	2580	3310	2440	2780	1270	3090	4490	1420	1070	1750	1390
22	4680	2690	2540	3120	2440	1650	3990	3900	1470	702	1670	1110
23	4630	3050	1860	2610	2220	1310	3700	4080	1390	404	1230	604
24	4400	2480	1540	3000	2910	1530	3720	3850	1270	871	1270	844
25	4430	2860	1700	2690	2300	1540	3810	3750	1020	962	1160	1550
26	4610	3120	1520	2630	2360	1500	4240	3690	1710	1310	694	1380
27	4110	2670	1500	2840	3050	1780	5150	3330	1720	1090	426	1490
28	3830	3130	2080	2300	2130	1740	5490	3220	1490	1480	971	889
29	3810	2530	1560	2780	---	1930	5820	3060	1630	604	944	775
30	3800	3090	1490	2970	---	1600	5720	3090	1700	536	1160	671
31	3790	---	1480	3170	---	1470	---	3030	---	583	759	---
TOTAL	119330	92930	82450	75120	84130	50440	88950	133940	56020	28503	36658	29271
MEAN	3849	3098	2660	2423	3005	1627	2965	4321	1867	919	1183	976
MAX	4850	3770	3430	3170	3660	2090	5820	5500	3180	1480	1850	1550
MIN	1760	2480	1480	1390	2130	1270	1400	3030	1020	404	144	148

CAL YR 1977 TOTAL 849791 MEAN 2328 MAX 6230 MIN 55
WTR YR 1978 TOTAL 877742 MEAN 2405 MAX 5820 MIN 144

04268000 RAQUETTE RIVER AT RAYMONDVILLE, NY

LOCATION.--Lat 44°50'20", long 74°58'45", St. Lawrence County, Hydrologic Unit 04150305, on right bank 250 ft (76 m) upstream from bridge on Grant Road at Raymondville, 0.3 mi (0.5 km) downstream from Trout Brook, 0.4 mi (0.6 km) downstream from Niagara Mohawk Power Corp. powerplant, and 18.0 mi (29.0 km) upstream from mouth.

DRAINAGE AREA.--1,131 mi^2 (2,929 km^2).

PERIOD OF RECORD.--November 1943 to current year.

GAGE.--Water-stage recorder. Datum of gage is 183.33 ft (55.879 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except those for winter periods, which are poor. Extensive diurnal fluctuation caused by power and industrial operations. Flow regulated since 1953 by Carry Falls Reservoir, about 46 mi (74 km) upstream and by Niagara Mohawk Power Corp. powerplant, 0.4 mi (0.6 km) upstream; considerable natural storage in large lakes above Piercefield.

AVERAGE DISCHARGE.--34 years (1944-78), 2,036 ft^3/s (57.66 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,000 ft^3/s (368 m^3/s) Apr. 5, 1974, gage height, 8.40 ft (2.560 m); maximum gage height, 9.24 ft (2.816 m) Feb. 22, 1954 (backwater from ice); minimum discharge, 2.2 ft^3/s (0.062 m^3/s) Sept. 18, 19, 1966; minimum daily, 7.0 ft^3/s (0.20 m^3/s) Oct. 15, 1951; minimum gage height, 0.42 ft (0.128 m) July 13, 1950.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,800 ft^3/s (193 m^3/s) Apr. 29, gage height, 5.81 ft (1.771 m); maximum gage height, 7.77 ft (2.368 m) Feb. 6 (backwater from ice); minimum discharge, 19 ft^3/s (0.54 m^3/s) July 3, 4, 5, 6, 10, 11, 15, gage height, 0.62 ft (0.189 m); minimum daily, 590 ft^3/s (16.7 m^3/s) July 30, Sept. 4, 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3490	4210	3470	2400	3700	2700	2000	6420	3320	1320	967	1050
2	4290	4170	4520	2500	3900	2500	2500	5780	3920	1110	819	690
3	3650	3870	4640	2500	4100	2400	2300	5780	4620	1030	1590	673
4	4250	3920	4170	2200	4300	2500	2100	5250	2910	1040	1790	590
5	4250	3730	3710	2100	4200	2700	2000	5230	1550	1130	1010	664
6	4130	4040	3730	1900	4100	2500	2200	5000	1600	1020	614	1060
7	4040	3850	3670	2200	3900	2500	2300	4800	1870	1260	896	1250
8	4080	4290	3670	2400	3800	2300	2300	4560	2380	1410	1370	1350
9	4230	3980	3770	2600	3700	2200	2100	4680	2000	867	1400	829
10	4720	3260	3630	2800	3700	2100	2100	4760	1870	690	1010	656
11	4620	4440	3890	2900	3800	2300	3670	5020	1130	1040	1030	967
12	4380	4480	4540	3000	3900	2100	5740	5520	1570	1060	1490	1310
13	3940	4320	5340	2900	3700	2000	6110	5900	2240	1300	1630	1110
14	3810	4210	5820	2900	3500	1900	5680	6130	2570	1100	877	1200
15	3980	4340	5340	3300	3300	1900	4760	5560	2570	877	1680	1200
16	4060	3610	4150	3300	3100	2200	4020	4840	2540	622	1900	800
17	4720	3400	3960	3100	3100	2100	3610	4740	2000	781	2060	590
18	6130	3530	4190	3000	3300	1900	3550	4800	1840	1010	1960	848
19	5920	3420	4130	3000	3400	1800	3920	5380	1860	1220	1720	1520
20	5310	3380	3710	3000	3500	2000	4780	5290	1910	1120	1310	1460
21	5270	3340	3590	3200	3300	1900	5620	5210	1870	998	946	1420
22	5400	3250	3440	3400	3100	1800	5040	4900	1790	1050	1600	1670
23	5420	3210	2270	3200	3200	1800	4860	4080	1420	606	1740	829
24	5310	3320	2030	3100	3300	2000	4620	3830	1460	791	1670	998
25	5190	3280	1940	3000	3200	2000	4600	4250	1550	1010	1330	1120
26	5150	3300	2200	3000	3200	1900	4620	4060	1410	1080	829	1570
27	4940	3420	2500	3000	3600	1800	4960	3550	1670	1220	682	1550
28	3730	3440	2600	3000	3200	1800	5760	3400	1840	1570	1160	1550
29	4100	3420	2300	3200	---	2000	6520	3490	1800	998	926	1400
30	4210	3210	2200	3400	---	2100	6350	3280	1790	590	1060	1620
31	4190	---	2300	3600	---	1900	---	3250	---	877	998	---
TOTAL	140910	111640	111420	89100	100100	65600	120690	148740	62890	31797	40064	33544
MEAN	4545	3721	3594	2874	3575	2116	4023	4798	2096	1026	1292	1118
MAX	6130	4480	5820	3600	4300	2700	6520	6420	4620	1570	2060	1670
MIN	3490	3210	1940	1900	3100	1800	2000	3250	1130	590	614	590

CAL YR 1977 TOTAL 1012682 MEAN 2774 MAX 6720 MIN 413
WTR YR 1978 TOTAL 1056495 MEAN 2895 MAX 6520 MIN 590

04269000 ST. REGIS RIVER AT BRASHER CENTER, NY
(National stream-quality accounting network station)

LOCATION.--Lat 44°51'49", long 74°46'45", St. Lawrence County, Hydrologic Unit 04150306, on left bank 600 ft (183 m) upstream from highway bridge at Brasher Center, and 6.5 mi (10.5 km) downstream from West Branch. Water-quality sampling site at discharge station.

DRAINAGE AREA.--616 mi² (1,595 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1910 to current year. Monthly discharge only for some periods, published in WSP 1307.

REVISED RECORDS.--WSP 584: Drainage area. WSP 1387: 1910-16, 1917(M).

GAGE.--Water-stage recorder. Datum of gage is 217.23 ft (66.212 m) National Geodetic Vertical Datum of 1929. Prior to June 24, 1916, nonrecording gage at site 600 ft (183 m) downstream at different datum. June 24, 1916 to Nov. 10, 1917, and Jan. 1, 1919 to Aug. 13, 1920, nonrecording gage at present site and datum.

REMARKS.--Records good except those for winter periods, which are poor. Slight diurnal fluctuation caused by powerplant operations above station.

AVERAGE DISCHARGE.--68 years, 1,046 ft³/s (29.62 m³/s), 23.06 in/yr (586 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,800 ft³/s (476 m³/s) Apr. 6, 1937, gage height, 12.82 ft (3.908 m); maximum gage height recorded, about 15.3 ft (4.66 m) Apr. 6, 1937 (ice jam); minimum discharge observed, about 34 ft³/s (0.96 m³/s) Aug. 8, 1917, gage height, 5.25 ft (1.600 m); minimum daily, 37 ft³/s (1.05 m³/s) Aug. 8, 1917.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 5,600 ft³/s (159 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 18	0800	6,070	172	9.41	2.868	Apr. 21	1730	5,670	161	9.25	2.819
Apr. 14	0115	*8,050	228	*10.15	3.094						

Minimum discharge, 236 ft³/s (6.68 m³/s) Sept. 9, gage height, 5.88 ft (1.792 m); minimum daily, 255 ft³/s (7.22 m³/s) July 21, 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1980	872	1380	900	1200	660	1900	3650	1250	630	403	411
2	4490	856	2830	860	1200	640	3400	3070	1270	514	363	363
3	4110	792	2490	800	1100	640	2900	2610	1220	487	363	332
4	3920	951	1970	760	1100	640	2300	2270	942	395	542	325
5	3390	1660	1630	740	1000	620	2500	2090	786	363	650	303
6	2600	1900	1020	720	980	620	3100	2010	670	332	514	289
7	2060	1820	940	900	920	620	3200	2060	874	318	427	282
8	1660	1780	900	1300	900	620	3300	2010	1010	296	371	289
9	1550	1760	860	1700	860	620	2600	2170	1190	325	340	289
10	1710	1600	840	2000	820	600	2200	3010	1160	479	318	275
11	1630	2050	840	3600	780	620	3290	3090	1060	533	303	282
12	1460	2150	820	2700	760	640	6740	2560	908	453	325	461
13	1310	1900	820	2300	720	680	6400	2220	819	355	386	701
14	1200	1660	1100	1900	700	780	7380	1940	1120	325	363	754
15	1130	1410	1800	1700	660	1000	5820	1770	1220	310	318	561
16	1380	1470	4000	1500	660	1300	4570	1690	1010	296	296	514
17	2970	1610	3500	1400	640	1300	4060	1590	808	289	363	561
18	5730	1760	3000	1300	640	1100	3650	1540	650	282	571	571
19	4300	1650	2400	1200	640	1000	4000	1490	650	268	610	496
20	3110	1430	2000	1100	660	920	4630	1060	1520	261	533	453
21	2500	1290	1700	1100	660	1000	5480	1240	1810	255	524	419
22	2110	1230	1600	1100	680	1200	5050	1330	1400	255	470	411
23	2040	1180	1400	1100	700	2000	4500	1270	1010	268	403	561
24	1750	1260	1300	1000	700	1900	4390	1130	808	355	395	479
25	1500	1200	1200	1000	700	1700	4590	1000	681	427	461	378
26	1390	1200	1100	1100	680	1500	4910	919	542	403	590	371
27	1240	1100	1100	1200	680	1400	4950	841	561	371	600	371
28	1130	1000	1000	1400	660	2000	4860	754	681	340	444	371
29	1050	900	980	1500	---	2900	4660	660	650	340	461	363
30	937	1000	960	1400	---	2600	4230	630	630	395	505	355
31	946	---	920	1300	---	2200	---	830	---	403	479	---
TOTAL	68283	42441	48400	42580	22400	36020	125560	54504	28910	11323	13691	12591
MEAN	2203	1415	1561	1374	800	1162	4185	1758	964	365	442	420
MAX	5730	2150	4000	3600	1200	2900	7380	3650	1810	630	650	754
MIN	937	792	820	720	640	600	1900	630	542	255	296	275
CFSM	3.58	2.30	2.53	2.23	1.30	1.89	6.79	2.85	1.57	.59	.72	.68
IN.	4.12	2.56	2.92	2.57	1.35	2.18	7.58	3.29	1.75	.68	.83	.76

CAL YR 1977 TOTAL 458711 MEAN 1257 MAX 6760 MIN 208 CFSM 2.04 IN 27.70
WTR YR 1978 TOTAL 506703 MEAN 1388 MAX 7380 MIN 255 CFSM 2.25 IN 30.60

Note.--No gage-height record, Dec. 8 to Jan. 23.

04269000 ST. REGIS RIVER AT BRASHER CENTER, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1955, 1960, 1970-72, 1974 to current year.
CHEMICAL DATA: 1955 (a), 1960 (b), 1970-72 (a), 1975-78 (d).
MINOR ELEMENTS DATA: 1975 (b), 1977-78 (b).
ORGANIC DATA: TOC--1974 (b), 1978 (c).
NUTRIENT DATA: 1970-71 (a), 1975-78 (d).
BIOLOGICAL DATA:
Coliform bacteria--1975-78 (d).
Phytoplankton--1975-77 (d), 1978 (c).
Periphyton--1975-78 (b).
SEDIMENT DATA: 1975 (d), 1976-77 (c), 1978 (d).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: September 1974 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum daily, 29.0°C Aug. 4, 1975; minimum, freezing point on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum daily, 26.0°C July 5, 6, 7; minimum, freezing point on many days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TURBIDITY (JTU)	TURBIDITY (NTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)
OCT 04...	1000	3940	65	7.1	2	--	11.2	97	140	54	24	10
NOV 02...	1100	863	72	6.9	1	--	10.5	88	52	29	28	3
DEC 01...	1045	1190	74	6.9	1	--	10.6	75	64	85	29	2
JAN 23...	1130	E1100	83	6.7	2	--	14.8	102	290	56	31	10
FEB 15...	1245	E660	110	6.8	1	--	12.8	88	97	57	34	12
MAR 07...	1145	E620	110	6.5	2	--	8.5	59	83	26	39	10
APR 20...	1000	4540	54	6.6	1	--	12.2	92	67	100	20	10
MAY 09...	1145	2110	49	6.6	1	--	9.6	94	68	K15	20	2
JUN 12...	1000	830	60	6.8	--	2.0	8.7	98	97	70	--	--
JUL 13...	1000	363	77	6.9	--	1.0	8.7	98	140	33	29	6
AUG 10...	1030	332	76	7.0	--	1.0	8.1	95	60	K8	32	7
SEP 14...	1000	765	77	6.9	--	1.0	9.8	95	170	55	32	5

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)
OCT 04...	6.4	2.0	1.1	.7	17	0	14	10	2.3	.0	6.2	64
NOV 02...	7.2	2.4	1.3	.6	30	0	25	8.1	2.8	.0	6.9	52
DEC 01...	7.7	2.4	1.3	.5	33	0	27	8.2	1.7	.0	7.3	56
JAN 23...	8.1	2.6	1.5	.5	26	0	21	9.2	2.2	.1	8.6	56
FEB 15...	6.7	3.0	1.6	.6	27	0	22	9.5	1.4	.0	9.6	57
MAR 07...	10	3.3	1.8	.6	35	0	29	8.5	1.1	.0	9.7	68
APR 20...	5.2	1.6	1.0	.5	12	0	10	9.1	1.8	.0	4.8	40
MAY 09...	5.4	1.6	1.2	.6	22	0	18	7.5	.6	.0	3.7	38
JUN 12...	--	--	--	--	--	--	40	6.7	1.9	.1	5.9	63
JUL 13...	7.7	2.4	1.9	.6	--	--	23	6.5	1.6	.1	5.6	58
AUG 10...	8.4	2.7	1.7	.7	--	--	25	7.1	2.5	.0	5.7	54
SEP 14...	8.0	2.8	2.0	.5	--	--	27	7.7	1.8	.1	7.0	62

E Estimated.
K Results based on colony count outside the acceptable range (non-ideal colony count).

04269000 ST. REGIS RIVER AT BRASHER CENTER, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)
OCT 04...	37	.07	--	--	.51	--	.58	.00	--	1	0
NOV 02...	44	.16	--	--	.18	--	.34	.00	--	--	--
DEC 01...	45	.23	--	--	.21	--	.44	.01	--	--	--
JAN 23...	46	.28	--	--	.21	--	.49	.01	--	--	--
FEB 15...	48	.38	.02	.26	.28	.23	.66	.01	.00	0	0
MAR 07...	52	.38	.03	.25	.28	.24	.66	.01	.01	--	--
APR 20...	30	.27	.01	.24	.25	.30	.52	.00	.02	1	1
MAY 09...	31	.14	.00	.31	.31	.40	.45	.10	.01	--	--
JUN 12...	--	.13	.01	.41	.42	.37	.55	.01	.00	--	--
JUL 13...	41	.12	.01	.46	.47	.29	.59	.01	.00	0	0
AUG 10...	44	.02	.00	.30	.30	.73	.32	.01	.02	--	--
SEP 14...	46	.12	.01	.23	.24	.18	.36	.01	.00	--	--

DATE	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)
OCT 04...	--	--	0	0	10	7	0	0	5	3	650
NOV 02...	--	--	--	--	--	--	--	--	--	--	--
DEC 01...	--	--	--	--	--	--	--	--	--	--	--
JAN 23...	--	--	--	--	--	--	--	--	--	--	--
FEB 15...	0	0	0	0	20	1	0	0	7	1	260
MAR 07...	--	--	--	--	--	--	--	--	--	--	--
APR 20...	0	0	0	0	--	1	--	0	--	1	--
MAY 09...	--	--	--	--	--	--	--	--	--	--	--
JUN 12...	--	--	--	--	--	--	--	--	--	--	--
JUL 13...	0	0	0	0	10	0	0	0	3	2	610
AUG 10...	--	--	--	--	--	--	--	--	--	--	--
SEP 14...	--	--	--	--	--	--	--	--	--	--	--

04269000 ST. REGIS RIVER AT BRASHER CENTER, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)
OCT 04...	290	14	7	40	20	<.5	<.5	0	0	--	--
NOV 02...	--	--	--	--	--	--	--	--	--	--	--
DEC 01...	--	--	--	--	--	--	--	--	--	--	--
JAN 23...	--	--	--	--	--	--	--	--	--	--	--
FEB 15...	170	5	3	0	0	<.5	<.5	0	0	0	0
MAR 07...	--	--	--	--	--	--	--	--	--	--	--
APR 20...	100	0	0	--	10	<.5	<.5	0	0	--	0
MAY 09...	--	--	--	--	--	--	--	--	--	--	--
JUN 12...	--	--	--	--	--	--	--	--	--	--	--
JUL 13...	340	0	2	30	20	.5	.5	0	0	0	0
AUG 10...	--	--	--	--	--	--	--	--	--	--	--
SEP 14...	--	--	--	--	--	--	--	--	--	--	--

DATE	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)
OCT 04...	20	10	15	--	--
NOV 02...	--	--	9.8	--	--
DEC 01...	--	--	7.2	--	--
JAN 23...	--	--	12	--	--
FEB 15...	20	10	--	9.3	.9
MAR 07...	--	--	4.0	--	--
APR 20...	--	10	--	1.9	.5
MAY 09...	--	--	10	--	--
JUN 12...	--	--	7.2	--	--
JUL 13...	10	10	--	13	1.0
SEP 14...	--	--	4.6	--	--

SUSPENDED-SEDIMENT MEASUREMENTS, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
OCT 04...	1000	3940	8	85	APR 20...	1000	4540	9	110
NOV 02...	1100	863	1	2.3	MAY 09...	1145	2110	5	28
DEC 01...	1045	1190	9	29	JUN 12...	1000	830	10	22
JAN 23...	1130	E1100	3	E8.9	JUL 13...	1000	363	10	9.8
FEB 15...	1245	E660	3	E5.3	AUG 10...	1030	332	21	19
MAR 07...	1145	E620	7	E12	SEP 14...	1000	765	2	4.1

E Estimated.

04269000 ST. REGIS RIVER AT BRASHER CENTER, NY--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

PHYTOPLANKTON

DATE	OCT 4,77	NOV 2,77	MAR 7,78	MAY 9,78	JUN 12,78
TIME	1000	1100	1145	1145	1000
TOTAL CELLS/ML	6400	220	200	2100	310
DIVERSITY: DIVISION	0.6	0.0	1.3	0.8	1.4
.CLASS	0.6	0.0	1.3	0.8	1.7
..ORDER	1.6	0.6	1.3	0.9	1.7
...FAMILY	1.8	2.7	2.4	1.1	2.8
....GENUS	1.8	2.9	2.4	1.2	2.8

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)										
.CHLOROPHYCEAE										
..CHLOROCOCCALES										
...OOCYSTACEAE										
....ANKISTRODESMUS	*	0	--	-	--	-	--	-	--	-
....FRANCEIA	--	-	--	-	--	-	--	-	22	7
....KIRCHNERIELLA	110	2	--	-	--	-	--	-	--	-
...SCENEDESMACEAE										
....ACTINASTRUM	--	-	--	-	26	13	--	-	--	-
....SCENEDESMUS	--	-	--	-	--	-	--	-	89#	29
..VOLVOCALES										
...CHLAMYDOMONADACEAE										
....CHLAMYDOMONAS	53	1	--	-	--	-	19	1	--	-
CHRYSOPHYTA										
.BACILLARIOPHYCEAE										
..CENTRALES										
...COSCINODISCACEAE										
....CYCLOTELLA	67	1	28	13	--	-	19	1	--	-
....MELOSIRA	*	0	--	-	--	-	--	-	--	-
..PENNALES										
...ACHNANTHACEAE										
....ACHNANTHES	53	1	21	10	33#	16	38	2	22	7
....COCCONEIS	--	-	28	13	--	-	--	-	--	-
...CYMBELLACEAE										
....AMPHORA	*	0	--	-	--	-	--	-	--	-
....CYMBELLA	*	0	--	-	--	-	--	-	--	-
...DIATOMACEAE										
....DIATOMA	--	-	28	13	--	-	--	-	--	-
...FRAGILARIACEAE										
....FRAGILARIA	53	1	--	-	--	-	--	-	--	-
....HANNAEA	--	-	--	-	--	-	76	4	--	-
....SYNEDRA	--	-	14	6	26	13	95	5	--	-
...GOMPHONEMATACEAE										
....GOMPHONEMA	67	1	28	13	--	-	--	-	--	-
...MERIDIONACEAE										
....MERIDION	--	-	--	-	--	-	--	-	22	7
...NAVICULACEAE										
....NAVICULA	53	1	21	10	7	3	19	1	45	14
...NITZSCHIACEAE										
....NITZSCHIA	53	1	50#	23	--	-	57	3	45	14
...TABELLARIACEAE										
....TABELLARIA	*	0	--	-	59#	29	--	-	--	-
.CHRYSOPHYCEAE										
..CHRYSOMONADALES										
...OCHROMONADACEAE										
....DINOBRYON	*	0	--	-	--	-	--	-	--	-
....OCHROMONAS	--	-	--	-	--	-	--	-	22	7
CYANOPHYTA (BLUE-GREEN ALGAE)										
.CYANOPHYCEAE										
..CHROCCOCCALES										
...CHROCCOCCACEAE										
....ANACYSTIS	3000#	48	--	-	52#	26	19	1	--	-
..HORMOGONALES										
...NOSTOCACEAE										
....ANABAENA	120	2	--	-	--	-	--	-	--	-
...OSCILLATORIACEAE										
....OSCILLATORIA	2600#	41	--	-	--	-	--	-	--	-
..CHROCCOCCALES										
...CHROCCOCCACEAE										
....GOMPHOSPHAERIA	--	-	--	-	--	-	1700#	81	--	-
EUGLENOPHYTA (EUGLENOIDS)										
.EUGLENOPHYCEAE										
..EUGLENALES										
...EUGLENACEAE										
....TRACHELOMONAS	*	0	--	-	--	-	38	2	45	14

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

04269000 ST. REGIS RIVER AT BRASHER CENTER, NY--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

PERIPHYTON

Dates of exposure	Length of exposure (days)	Biomass (g/m²) Dry weight	Biomass (g/m²) Ash weight	Chlorophyll a (mg/m²)	Chlorophyll b (mg/m²)	Sampling method
May 9 to June 13	35	0.787	0.551	0.550	0.220	Polyethylene strip
June 13 to July 13	30	1.26	.787	1.45	.390	Polyethylene strip
July 13 to Aug. 10	28	3.23	2.05	2.03	.440	Polyethylene strip
Aug. 10 to Sept. 14	35	.551	.394	.880	1.77	Polyethylene strip

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
(ONCE DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10.5	6.0	.0	.0	.0	.0	.0	4.0	25.0	23.0	19.5	19.0
2	10.5	6.5	.0	.0	.0	.0	.0	4.5	23.5	24.0	20.5	20.0
3	10.5	6.5	.0	.0	.0	.0	.0	5.0	22.0	24.5	22.0	19.0
4	10.5	7.0	.0	.0	.0	.0	.0	7.0	19.0	25.0	23.0	19.0
5	10.0	7.0	.0	.0	.0	.0	.0	8.0	18.0	26.0	24.5	18.5
6	10.0	7.5	.0	.0	.0	.0	.0	9.5	17.5	26.0	25.0	18.0
7	10.0	8.0	.0	.0	.0	.0	.0	10.5	17.5	26.0	25.0	18.0
8	9.5	8.0	.0	.0	.0	.0	.0	12.0	18.0	25.5	25.5	18.0
9	9.5	8.0	.0	.0	.0	.0	.0	13.5	16.5	25.0	25.0	17.0
10	9.0	7.0	.0	.0	.0	.0	.0	14.0	19.5	25.0	25.0	17.0
11	9.0	5.5	.0	.0	.0	.0	.0	13.5	20.5	25.5	24.5	16.5
12	8.0	5.0	.0	.0	.0	.0	.0	13.0	21.5	23.0	24.0	16.5
13	6.5	4.0	.0	.0	.0	.0	.0	13.0	23.0	23.0	25.0	17.0
14	5.5	4.0	.0	.0	.0	.0	.5	12.5	23.0	22.5	25.0	16.5
15	5.0	4.0	.0	.0	.0	.0	1.0	12.0	22.5	22.0	25.0	17.5
16	5.0	4.0	.0	.0	.0	.0	2.0	11.5	23.0	22.5	24.5	18.0
17	6.0	3.5	.0	.0	.0	.0	3.0	14.0	20.0	22.0	25.0	18.0
18	6.5	3.0	.0	.0	.0	.0	3.5	15.0	21.0	25.0	25.0	17.5
19	7.0	3.0	.0	.0	.0	.0	3.5	14.5	20.0	25.5	25.0	17.0
20	7.0	3.0	.0	.0	.0	.0	3.5	15.5	19.5	25.5	25.0	17.0
21	7.0	2.0	.0	.0	.0	.0	3.5	16.5	20.0	25.5	23.0	---
22	7.0	2.0	.0	.0	.0	.0	4.0	19.5	20.0	25.5	21.5	17.0
23	7.0	1.5	.0	.0	.0	.0	4.0	21.0	20.5	24.0	20.5	15.5
24	6.5	1.5	.0	.0	.0	.0	4.0	24.0	21.0	24.0	20.0	15.0
25	6.5	1.0	.0	.0	.0	.0	4.5	24.5	21.5	24.5	19.0	14.0
26	6.5	.0	.0	.0	.0	.0	4.5	24.0	22.0	24.5	19.0	14.0
27	6.5	.0	.0	.0	.0	.0	4.0	24.5	22.0	23.0	19.0	13.0
28	6.5	.0	.0	.0	.0	.0	4.0	25.0	22.0	23.0	18.5	12.5
29	7.0	.0	.0	.0	---	.0	4.0	25.0	22.0	22.0	19.0	12.0
30	6.5	.0	.0	.0	---	.0	4.0	25.0	22.0	19.5	18.0	12.0
31	6.0	---	.0	.0	---	.0	---	25.0	---	19.0	18.0	---
MEAN	7.5	4.0	.0	.0	.0	.0	2.0	15.5	21.0	24.0	22.5	16.5

WTR YR 1978 MEAN 9.5 MAX 26.0 MIN .0

04269043 DEER RIVER AT NORTH LAWRENCE, NY

LOCATION.--Lat 44°47'57", long 74°40'24", St. Lawrence County, Hydrologic Unit 04150306, on right bank 0.4 mi (0.6 km) upstream from abandoned railroad bridge, 0.5 mi (0.8 km) upstream from dam at Kraft Co. plant at North Lawrence, and 1.7 mi (2.7 km) downstream from Kingston Brook.

DRAINAGE AREA.--88.2 mi² (228 km²).

PERIOD OF RECORD.--December 1972 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 330 ft (101 m), from topographic map.

REMARKS.--Records good except those for winter periods, which are poor.

COOPERATION.--Observer services furnished by personnel of the Kraft Co. plant, North Lawrence N.Y.

AVERAGE DISCHARGE.--5 years (1973-78), 178 ft³/s (5.041 m³/s), 27.41 in/yr (696 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,740 ft³/s (106 m³/s) Mar. 23, 1977, gage height, 6.18 ft (1.884 m), from rating curve extended above 1,500 ft³/s (42.5 m³/s); maximum gage height, 12.03 ft (3.667 m) Jan. 8, 1973 (backwater from ice); minimum discharge, 18 ft³/s (0.51 m³/s) Aug. 20, 21, 1975, gage height, 1.35 ft (0.411 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 800 ft³/s (23 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 1	2330	1,060	30.0	3.74	1.140
Oct. 17	1630	1,420	40.2	4.16	1.268
Dec. 15	1730	ice jam		*11.28	3.438
Apr. 2	0030	ice jam		9.16	2.792
Apr. 13	2100	*1,520	43.0	4.13	1.259
Apr. 21	0030	843	23.9	3.43	1.045

Minimum discharge, 31 ft³/s (0.88 m³/s) July 22, 23, gage height, 1.51 ft (0.460 m); minimum daily, 32 ft³/s (0.91 m³/s) July 21, 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	392	102	370	78	170	78	460	507	94	94	57	63
2	748	96	180	86	150	76	860	419	96	84	53	56
3	645	93	250	94	130	76	580	364	96	76	60	53
4	658	154	220	84	130	76	420	314	90	71	90	62
5	549	238	190	110	130	74	520	284	84	66	96	51
6	419	234	160	120	120	74	560	274	90	59	78	51
7	327	230	160	98	110	72	560	279	90	53	66	53
8	256	249	160	98	110	70	450	274	140	49	60	53
9	237	237	160	310	100	70	460	304	146	49	57	51
10	245	208	150	320	100	72	560	439	135	49	51	47
11	219	320	140	320	100	72	746	474	112	49	44	47
12	196	264	100	280	100	74	1010	395	94	46	60	88
13	175	228	110	250	110	74	1090	338	100	44	80	114
14	154	194	150	230	98	100	1140	289	184	44	57	90
15	167	169	300	250	96	170	820	251	181	44	44	70
16	224	178	260	190	92	280	650	226	140	41	38	65
17	856	213	240	150	90	210	600	210	109	39	59	68
18	1030	219	240	150	88	200	558	188	96	36	88	66
19	675	194	320	130	90	170	625	174	119	35	71	62
20	467	168	270	120	86	140	711	135	618	34	80	57
21	367	154	230	120	86	130	820	152	454	32	82	54
22	318	147	210	120	86	260	690	177	355	32	73	53
23	288	134	190	140	86	270	625	158	226	36	59	49
24	246	152	180	130	84	270	618	137	171	51	66	46
25	214	150	200	130	80	130	644	121	137	49	86	47
26	188	147	170	130	80	130	670	109	112	49	84	46
27	167	160	160	290	82	280	684	98	121	51	71	42
28	149	170	120	260	80	370	684	90	210	51	66	47
29	133	180	120	250	---	520	657	82	152	46	68	49
30	120	180	110	200	---	300	606	78	116	53	71	44
31	108	---	76	170	---	450	---	86	---	56	71	---
TOTAL	10937	5562	5896	5408	2864	5338	20078	7426	4868	1568	2086	1744
MEAN	353	185	190	174	102	172	669	240	162	50.6	67.3	58.1
MAX	1030	320	370	320	170	520	1140	507	618	94	96	114
MIN	108	93	76	78	80	70	420	78	84	32	38	42
CFSM	4.00	2.10	2.15	1.97	1.16	1.95	7.59	2.72	1.84	.57	.76	.66
IN.	4.61	2.35	2.49	2.28	1.21	2.25	8.47	3.13	2.05	.66	.88	.74

CAL YR 1977 TOTAL 73914 MEAN 203 MAX 3340 MIN 22 CFSM 2.30 IN 31.17
WTR YR 1978 TOTAL 73775 MEAN 202 MAX 1140 MIN 32 CFSM 2.29 IN 31.12

04270000 SALMON RIVER AT CHASM FALLS, NY

LOCATION.--Lat 44°45'22", long 74°13'09", Franklin County, Hydrologic Unit 04150307, on right bank 0.1 mi (0.2 km) downstream from Niagara Mohawk Power Corp. powerplant at Chasm Falls, and 3.0 mi (4.8 km) downstream from Duane Stream.

DRAINAGE AREA.--132 mi^2 (342 km^2).

PERIOD OF RECORD.--July 1925 to current year.

REVISED RECORDS.--WSP 729: 1931 (m). WSP 759: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,011.52 ft (308.311 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair. Seasonal regulation of flow by upstream reservoirs. Diurnal fluctuation at low and medium flow caused by powerplant. A small diversion from tributary stream above station is used as water supply for village of Malone.

AVERAGE DISCHARGE.--53 years, 227 ft^3/s (6.429 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,890 ft^3/s (81.8 m^3/s) Apr. 25, 1926, gage height, 5.0 ft (1.52 m); minimum, 9.8 ft^3/s (0.28 m^3/s) Sept. 26, 27, 1963, minimum daily, 28 ft^3/s (0.79 m^3/s) Sept. 4, 1934.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,880 ft^3/s (53.2 m^3/s) Oct. 18, gage height, 3.98 ft (1.213 m); minimum, 17 ft^3/s (0.48 m^3/s) Sept. 25, gage height, 0.51 ft (0.155 m); minimum daily, 122 ft^3/s (3.45 m^3/s) July 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	423	254	221	215	242	170	316	887	316	184	152	151
2	851	180	343	215	234	170	452	671	284	166	148	139
3	872	164	275	208	244	171	430	538	293	161	163	130
4	952	210	230	205	252	172	392	486	265	156	298	167
5	805	339	182	204	242	169	395	496	247	153	222	141
6	558	326	161	204	226	166	405	559	273	152	171	138
7	439	364	193	203	224	165	392	576	246	148	168	146
8	360	306	190	201	233	163	401	593	294	141	150	150
9	409	377	180	397	213	170	365	693	302	154	141	137
10	547	335	170	515	223	160	329	895	266	161	150	130
11	448	364	160	514	216	170	420	870	242	152	150	141
12	369	382	170	544	201	165	706	700	219	146	148	207
13	333	330	220	538	198	168	829	587	214	144	148	220
14	301	298	260	502	195	176	1090	522	247	122	140	170
15	354	278	421	454	190	220	1010	460	234	135	133	153
16	450	273	444	416	197	219	728	418	178	140	124	177
17	682	243	398	378	188	206	620	392	162	139	184	172
18	1360	244	343	335	180	198	585	330	171	138	154	154
19	1150	238	298	302	188	195	711	346	239	134	143	145
20	862	205	285	281	181	179	896	319	549	130	161	139
21	593	205	268	267	173	211	1020	349	425	131	172	140
22	522	205	271	242	187	266	936	358	349	132	145	142
23	522	182	263	242	185	282	885	311	283	149	134	124
24	427	188	256	228	179	259	909	291	239	200	164	139
25	373	201	270	217	177	229	1030	223	214	159	208	132
26	343	196	259	260	179	236	1090	189	209	149	179	128
27	322	161	243	322	172	265	1160	192	201	144	150	143
28	298	175	248	298	175	392	1220	197	249	156	149	155
29	272	174	244	281	---	386	1240	198	236	160	176	150
30	272	168	245	274	---	339	1130	345	200	178	178	143
31	257	---	227	252	---	303	---	413	---	174	158	---
TOTAL	16726	7565	7936	9714	5694	6740	22092	14404	7846	4688	5061	4503
MEAN	540	252	256	313	203	217	736	465	262	151	163	150
MAX	1360	382	444	544	252	392	1240	895	549	200	298	220
MIN	257	161	160	201	172	160	316	189	162	122	124	124

CAL YR 1977 TOTAL 103116 MEAN 283 MAX 1580 MIN 92
WTR YR 1978 TOTAL 112971 MEAN 310 MAX 1360 MIN 122

04270200 LITTLE SALMON RIVER AT BOMBAY, NY

LOCATION.--Lat 44°56'24", long 74°33'24", Franklin County, Hydrologic Unit 04150307, on right bank 50 ft (15 m) downstream from bridge on road to Fort Covington Center, 0.5 mi (0.8 km) east of village of Bombay, and 7.2 mi (11.6 km) upstream from mouth.

DRAINAGE AREA.--93.6 mi² (242 km²).

PERIOD OF RECORD.--August to November 1957, July 1958 to current year. Occasional low-flow measurements, water years 1954-55, 1957.

GAGE.--Water-stage recorder. Datum of gage is 173.91 ft (53.008 m) National Geodetic Vertical Datum of 1929. August to November 1957, at site 100 ft (30 m) upstream at datum 0.72 ft (0.219 m) higher.

REMARKS.--Records fair except those for winter periods, which are poor.

AVERAGE DISCHARGE.--20 years (1958-78), 119 ft³/s (3.370 m³/s), 17.27 in/yr (439 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,250 ft³/s (92.0 m³/s) Apr. 4, 1974, gage height, 12.90 ft (3.932 m); minimum, 8.0 ft³/s (0.23 m³/s) Aug. 6, 7, 1965, gage height, 1.52 ft (0.463 m); minimum gage height, 0.85 ft (0.259 m) Sept. 2, 1957, site and datum then in use.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 900 ft³/s (25 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 2	1100	1,610	45.6	8.88	2.707	Apr. 2	1530	ice jam		*11.41	3.478
Oct. 18	0330	2,050	58.1	10.13	3.088	Apr. 12	0730	*2,560	72.5	11.28	3.438
Dec. 2	0630	1,220	34.5	7.66	2.335	June 20	1430	1,050	29.7	6.87	2.094

Minimum discharge, 21 ft³/s (0.60 m³/s) Sept. 25, gage height, 1.57 ft (0.478 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	266	89	240	82	150	66	700	241	63	51	31	27
2	1230	88	872	90	130	66	740	231	61	45	29	25
3	540	86	315	88	120	64	500	225	58	42	32	24
4	575	133	181	90	130	64	440	206	51	40	79	25
5	320	317	123	110	120	64	470	188	50	38	50	29
6	204	232	130	110	100	62	480	174	61	35	34	25
7	160	263	130	100	86	62	470	166	55	34	29	26
8	128	248	130	100	72	62	460	154	128	34	28	29
9	171	278	120	250	70	62	540	182	124	34	29	26
10	243	199	110	320	72	62	675	325	89	34	29	24
11	165	349	100	360	74	64	1320	330	70	32	26	24
12	127	287	100	330	72	68	2130	238	54	30	25	36
13	106	184	140	270	70	70	1540	198	58	28	36	68
14	97	147	200	240	70	80	1510	168	134	28	30	43
15	106	125	250	250	68	150	728	152	128	27	26	32
16	226	142	230	170	66	190	535	150	73	28	24	29
17	811	196	220	140	68	180	528	152	55	26	28	29
18	1450	219	230	130	68	150	471	158	50	26	40	28
19	453	181	250	120	68	140	528	123	63	25	32	26
20	272	145	230	120	68	130	721	105	658	24	38	25
21	204	127	200	110	70	140	804	105	325	24	42	25
22	180	127	190	120	70	200	575	136	196	24	32	26
23	211	113	180	120	70	260	429	103	121	27	28	28
24	162	131	170	120	68	210	389	89	91	52	30	25
25	139	137	170	120	68	130	387	78	72	37	46	23
26	128	123	160	130	66	170	373	71	61	30	40	23
27	118	115	120	250	66	300	358	66	57	31	32	24
28	109	120	110	260	66	450	339	61	71	33	29	24
29	102	130	110	220	---	400	310	55	74	32	31	28
30	96	149	80	190	---	360	275	52	67	35	33	28
31	93	---	76	170	---	460	---	50	---	36	30	---
TOTAL	9192	5180	5867	5280	2286	4936	19725	4732	3218	1022	1048	854
MEAN	297	173	189	170	81.6	159	658	153	107	33.0	33.8	28.5
MAX	1450	349	872	360	150	460	2130	330	658	52	79	68
MIN	93	86	76	82	66	62	275	50	50	24	24	23
CFSM	3.17	1.85	2.02	1.82	.87	1.70	7.03	1.64	1.14	.35	.36	.30
IN.	3.65	2.06	2.33	2.10	.91	1.96	7.84	1.88	1.28	.41	.42	.34

CAL YR 1977 TOTAL 48811 MEAN 134 MAX 1450 MIN 17 CFSM 1.43 IN 19.40
WTR YR 1978 TOTAL 63340 MEAN 174 MAX 2130 MIN 23 CFSM 1.86 IN 25.17

04270510 CHATEAUGAY RIVER BELOW CHATEAUGAY, NY

LOCATION.--Lat 44°57'49", long 74°07'53", Franklin County, Hydrologic Unit 04150307, on left bank 10 ft (3 m) downstream from bridge on Sam Cook Road, 0.2 mi (0.3 km) downstream from Marble River, 2.4 mi (3.9 km) upstream from international boundary, and 4.1 mi (6.6 km) northeast of Chateaugay.

DRAINAGE AREA.--151 mi^2 (391 km^2).

PERIOD OF RECORD.--December 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 411.33 ft (125.373 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are poor. Flow regulated at Forge Dam on Upper and Lower Chateaugay Lakes.

AVERAGE DISCHARGE.--12 years (1967-78), 256 ft^3/s (7.250 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,200 ft^3/s (147 m^3/s) Apr. 4, 1974, gage height, 7.33 ft (2.234 m), from rating curve extended above 1,600 ft^3/s (45.3 m^3/s); maximum gage height, 10.99 ft (3,350 m) Feb. 11, 1966 (ice jam); minimum discharge, 45 ft^3/s (1.27 m^3/s) Aug. 31, 1969, gage height, 2.66 ft (0.811 m); minimum daily, 54 ft^3/s (1.53 m^3/s) Aug. 20, 1975.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,560 ft^3/s (10.1 m^3/s) Apr. 13, gage height, 6.62 ft (2.018 m), from rating curve extended above 1,600 ft^3/s (45.3 m^3/s); minimum, 89 ft^3/s (2.52 m^3/s) July 28, 29, gage height, 2.93 ft (0.893 m); minimum daily, 90 ft^3/s (2.55 m^3/s) Aug. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	721	397	390	230	280	270	457	1170	142	156	93	93
2	812	384	330	230	270	260	558	1140	145	120	90	93
3	707	365	300	240	270	260	406	1050	145	120	104	108
4	746	421	290	250	270	260	373	908	140	120	98	133
5	569	431	280	250	270	260	501	717	149	118	93	129
6	533	412	270	230	260	250	452	541	186	106	92	131
7	569	421	270	220	260	250	468	541	186	104	92	138
8	819	457	270	250	260	240	452	535	233	108	95	129
9	839	421	260	270	260	250	373	607	243	112	95	124
10	825	393	240	290	260	260	378	588	240	110	102	124
11	772	483	230	290	270	280	900	512	233	102	100	127
12	721	416	220	290	270	310	1280	523	226	100	106	154
13	600	393	250	270	270	350	2170	512	226	100	102	240
14	488	379	300	260	260	450	1430	506	258	102	98	240
15	360	370	340	250	260	640	900	490	226	100	98	258
16	346	379	300	250	250	330	839	468	219	100	98	262
17	1480	388	290	240	250	300	869	426	215	100	108	251
18	1110	374	320	240	240	280	900	411	222	100	97	373
19	740	370	360	230	240	260	1010	387	310	102	97	387
20	672	355	330	230	230	243	1450	359	558	100	104	345
21	665	365	310	230	240	266	1260	373	336	100	97	341
22	638	350	290	230	240	306	1120	319	306	102	95	319
23	606	318	280	230	250	274	1110	240	282	116	95	270
24	581	336	270	230	250	255	1120	236	270	104	110	243
25	569	318	260	240	250	251	1120	219	247	97	100	219
26	563	322	250	320	260	247	1130	192	243	93	97	202
27	545	292	250	390	270	323	1180	179	240	97	95	194
28	527	310	240	350	270	373	1170	129	233	93	100	184
29	467	330	240	320	---	364	1200	127	215	95	98	171
30	416	330	230	290	---	315	1210	129	202	100	95	166
31	407	---	230	280	---	306	---	133	---	95	95	---
TOTAL	20413	11280	8690	8120	7230	9283	27786	14667	7076	3272	3039	6148
MEAN	658	376	280	262	258	299	926	473	236	106	98.0	205
MAX	1480	483	390	390	280	640	2170	1170	558	156	110	387
MIN	346	292	220	220	230	240	373	127	140	93	90	93

CAL YR 1977 TOTAL 111010 MEAN 304 MAX 1480 MIN 70
WTR YR 1978 TOTAL 127004 MEAN 348 MAX 2170 MIN 90

04273500 SARANAC RIVER AT PLATTSBURGH, NY

LOCATION.--Lat 44°40'54", long 73°28'18", Clinton County, Hydrologic Unit 02010006, on right bank at Plattsburgh, 600 ft (183 m) downstream from Imperial Paper and Color Corp. dam, 3.0 mi (4.8 km) upstream from mouth, and 5.5 mi (8.8 km) downstream from Mead Brook.

DRAINAGE AREA.--608 mi² (1,575 km²). Prior to Nov. 12, 1919, 607 mi² (1,572 km²).

PERIOD OF RECORD.--March 1903 to September 1930, October 1943 to current year. Published as "near Plattsburgh," 1903-30.

REVISED RECORDS.--WSP 345: Drainage area. WSP 384: 1909-10 (monthly discharge only). WSP 1387: 1907-8. WSP 1437: 1908 (minimum daily only).

GAGE.--Water-stage recorder. Datum of gage is 155.74 ft (47.470 m) National Geodetic Vertical Datum of 1929. Prior to Nov. 12, 1919, nonrecording gage and Nov. 12, 1919 to Sept. 30, 1930, water-stage recorder, at site 1.5 mi (2.4 km) upstream at different datum.

REMARKS.--Records good except those for winter periods, which are fair. Considerable diurnal fluctuation caused by power and industrial operations. Slight regulation by storage in Upper and Lower Saranac Lakes and elsewhere. During year, city of Plattsburgh diverted an average of 5.86 ft³/s (0.17 m³/s) from Saranac River and Mead and West Brooks, tributaries above station, for municipal supply. About 1 ft³/s (0.028 m³/s) diverted from Great Chazy River basin into Saranac River for water supply of State Institutions at Dannemora.

AVERAGE DISCHARGE.--62 years, 835 ft³/s (23.65 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,500 ft³/s (326 m³/s) Apr. 8, 1928, from computation of flow over dam and through waste gates and powerplant; minimum daily, 10 ft³/s (0.28 m³/s) July 5, 1965.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 7,090 ft³/s (201 m³/s) Oct. 17, gage height, 8.52 ft (2.597 m); minimum, 67 ft³/s (1.90 m³/s) Sept. 28, gage height, 2.03 ft (0.619 m); minimum daily, 70 ft³/s (1.98 m³/s) Sept. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1880	1210	1240	860	1700	700	1420	3180	813	493	468	499
2	3610	1160	1700	840	1600	700	1930	2770	761	520	398	435
3	2490	1100	1450	840	1600	720	1630	2470	725	477	388	383
4	2510	1290	1320	840	1600	769	1420	2310	675	450	459	376
5	2180	1930	1240	820	1600	808	1640	2250	563	425	470	372
6	1910	1670	880	800	1600	760	1760	2300	709	417	391	491
7	1720	1780	1100	800	1500	649	1760	2300	536	199	348	374
8	1560	1780	1170	843	1400	583	1730	2300	744	357	349	351
9	1540	1930	1160	1350	1300	483	1590	2450	882	360	322	434
10	2050	1780	1070	2530	1200	465	1520	2840	871	404	324	398
11	1710	2410	1010	2130	1100	572	1950	2730	849	440	352	356
12	1420	2120	871	1940	940	596	2840	2520	784	376	347	348
13	1410	1780	862	1760	860	592	3470	2380	829	400	315	576
14	1390	1630	1050	1540	800	626	4710	2270	748	288	332	532
15	1580	1500	1370	1480	760	791	3680	2130	681	380	352	444
16	1790	1460	1710	1480	740	843	2950	2100	655	337	368	669
17	3980	1450	1570	1500	740	784	3080	2130	604	347	326	1270
18	5480	1440	1400	1500	760	728	3020	2030	622	309	368	830
19	3610	1440	1370	1520	780	722	3370	1870	748	296	442	683
20	3090	1350	1310	1620	820	744	3860	1750	779	358	403	502
21	2740	1270	1270	1500	800	699	3770	1690	881	350	405	381
22	2470	1320	1270	1500	800	787	3410	1650	831	386	413	391
23	2260	1280	1390	1600	780	887	3450	1270	820	371	421	362
24	1980	1290	1280	1300	780	817	3510	1300	716	423	429	338
25	1810	1300	1180	1100	760	766	3900	1310	645	473	506	391
26	1730	1300	1160	940	760	739	3820	1280	605	453	508	359
27	1620	1210	1020	900	740	787	3930	1230	567	331	516	211
28	1500	1020	915	920	720	1330	3960	1160	651	332	507	119
29	1420	1120	900	960	---	1490	3970	1020	590	380	470	70
30	1340	1150	880	1000	---	1250	3730	878	622	477	506	84
31	1250	---	860	1750	---	1280	---	885	---	512	514	---
TOTAL	67030	44470	36978	40473	29540	24467	86780	60753	21506	12121	12717	13029
MEAN	2162	1482	1193	1306	1055	789	2893	1960	717	391	410	434
MAX	5480	2410	1710	2530	1700	1490	4710	3180	882	520	516	1270
MIN	1250	1020	860	800	720	465	1420	878	536	199	315	70

CAL YR 1977 TOTAL 409966 MEAN 1123 MAX 5480 MIN 254
WTR YR 1978 TOTAL 449864 MEAN 1233 MAX 5480 MIN 70

04273900 LAKE PLACID AT LAKE PLACID, NY

LOCATION.--Lat 44°17'42", long 73°59'26", Essex County, Hydrologic Unit 02010004, on south shore of East Lake on Victor Herbert Drive, and 400 ft (122 m) north of State Highway 86 in village of Lake Placid.

DRAINAGE AREA.--20.1 mi² (52.1 km²) at outlet 0.7 mi (1.1 km) northwest of gage.

PERIOD OF RECORD.--November 1959 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 1,859.42 ft (566.751 m) May 3, 1972; minimum, 1,857.60 ft (566.196 m) Oct. 2, 1968.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 1,859.07 ft (566.644 m) Oct. 17; minimum, 1,857.68 ft (566.221 m) Sept. 6, 10.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1858.57	1858.32	1858.30	1858.22	1858.27	1858.11	1858.25	1858.68	1858.29	1858.15	1857.86	1857.79
2	1858.67	1858.30	1858.32	1858.21	1858.26	1858.11	1858.27	1858.62	1858.28	1858.12	1857.85	1857.77
3	1858.68	1858.29	1858.34	1858.22	1858.25	1858.10	1858.27	1858.56	1858.29	1858.10	1857.84	1857.77
4	1858.71	1858.35	1858.33	1858.21	1858.24	1858.10	1858.26	1858.52	1858.26	1858.08	1857.86	1857.76
5	1858.66	1858.44	1858.33	1858.20	1858.23	1858.10	1858.32	1858.50	1858.26	1858.06	1857.84	1857.75
6	1858.60	1858.49	1858.35	1858.20	1858.21	1858.10	1858.34	1858.51	1858.26	1858.05	1857.83	1857.72
7	1858.54	1858.53	1858.34	1858.18	1858.26	1858.08	1858.35	1858.52	1858.25	1858.03	1857.82	1857.76
8	1858.48	1858.52	1858.32	1858.20	1858.27	1858.08	1858.38	1858.56	1858.27	1858.03	1857.81	1857.74
9	1858.47	1858.49	1858.32	1858.41	1858.25	1858.07	1858.36	1858.68	1858.28	1858.05	1857.80	1857.73
10	1858.46	1858.48	1858.30	1858.50	1858.24	1858.07	1858.34	1858.79	1858.28	1858.04	1857.81	1857.71
11	1858.45	1858.55	1858.28	1858.50	1858.23	1858.06	1858.39	1858.79	1858.26	1858.01	1857.80	1857.72
12	1858.41	1858.54	1858.26	1858.48	1858.22	1858.07	1858.50	1858.76	1858.23	1857.98	1857.82	1857.78
13	1858.39	1858.52	1858.26	1858.44	1858.21	1858.07	1858.56	1858.75	1858.26	1857.96	1857.84	1857.78
14	1858.36	1858.47	1858.30	1858.41	1858.20	1858.06	1858.65	1858.75	1858.26	1857.95	1857.83	1857.77
15	1858.39	1858.44	1858.37	1858.39	1858.19	1858.10	1858.63	1858.73	1858.27	1857.94	1857.82	1857.76
16	1858.42	1858.41	1858.37	1858.36	1858.18	1858.10	1858.59	1858.69	1858.25	1857.94	1857.80	1857.81
17	1858.78	1858.41	1858.37	1858.34	1858.17	1858.09	1858.54	1858.71	1858.23	1857.95	1857.81	1857.83
18	1859.03	1858.42	1858.35	1858.38	1858.17	1858.09	1858.50	1858.67	1858.23	1857.93	1857.80	1857.82
19	1858.94	1858.41	1858.33	1858.35	1858.15	1858.09	1858.49	1858.62	1858.25	1857.92	1857.79	1857.82
20	1858.85	1858.38	1858.31	1858.34	1858.15	1858.10	1858.50	1858.59	1858.28	1857.91	1857.82	1857.81
21	1858.77	1858.38	1858.31	1858.36	1858.14	1858.10	1858.52	1858.61	1858.26	1857.90	1857.81	1857.81
22	1858.71	1858.36	1858.31	1858.34	1858.13	1858.11	1858.52	1858.59	1858.26	1857.90	1857.80	1857.82
23	1858.67	1858.34	1858.29	1858.32	1858.14	1858.13	1858.51	1858.54	1858.24	1857.89	1857.79	1857.81
24	1858.60	1858.33	1858.28	1858.29	1858.13	1858.13	1858.53	1858.50	1858.22	1857.90	1857.83	1857.80
25	1858.54	1858.32	1858.28	1858.28	1858.13	1858.13	1858.56	1858.47	1858.20	1857.87	1857.85	1857.79
26	1858.49	1858.33	1858.27	1858.31	1858.12	1858.15	1858.59	1858.43	1858.18	1857.85	1857.83	1857.78
27	1858.46	1858.32	1858.25	1858.34	1858.11	1858.23	1858.64	1858.40	1858.17	1857.85	1857.82	1857.76
28	1858.42	1858.30	1858.24	1858.33	1858.11	1858.24	1858.71	1858.37	1858.19	1857.87	1857.81	1857.78
29	1858.39	1858.28	1858.23	1858.32	---	1858.24	1858.76	1858.35	1858.18	1857.87	1857.81	1857.76
30	1858.36	1858.27	1858.23	1858.30	---	1858.24	1858.75	1858.33	1858.17	1857.89	1857.81	1857.75
31	1858.34	---	1858.23	1858.28	---	1858.23	---	1858.30	---	1857.87	1857.80	---
MEAN	1858.57	1858.40	1858.30	1858.32	1858.19	1858.12	1858.49	1858.58	1858.25	1857.96	1857.82	1857.78
MAX	1859.03	1858.55	1858.37	1858.50	1858.27	1858.24	1858.76	1858.79	1858.29	1858.15	1857.86	1857.83
MIN	1858.34	1858.27	1858.23	1858.15	1858.11	1858.06	1858.25	1858.30	1858.17	1857.85	1857.79	1857.71

CAL YR 1977 MEAN 1858.29 MAX 1859.05 MIN 1857.99
WTR YR 1978 MEAN 1858.23 MAX 1859.03 MIN 1857.71

04275000 EAST BRANCH AUSABLE RIVER AT AU SABLE FORKS, NY

LOCATION.--Lat 44°26'20", long 73°40'55", Essex County, Hydrologic Unit 02010004, on left bank 700 ft (213 m) upstream from bridge on Burt Street in Au Sable Forks, and 0.5 mi (0.8 km) upstream from confluence with West Branch.

DRAINAGE AREA.--198 mi² (513 km²).

PERIOD OF RECORD.--September 1924 to current year.

REVISED RECORDS.--WSP 759: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 545.37 ft (166.229 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 21, 1938, nonrecording gage at lower highway bridge in Au Sable Forks, 400 ft (122 m) upstream from confluence with West Branch at datum 3.54 ft (1.079 m) lower.

REMARKS.--Records good except those for winter periods, which are poor. Occasional regulation of storage in Upper and Lower Ausable Lakes and occasional small diurnal fluctuation, cause unknown.

AVERAGE DISCHARGE.--54 years, 309 ft³/s (8.751 m³/s), 21.20 in/yr (538 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 20,100 ft³/s (569 m³/s) Sept. 22, 1938, gage height, 12.91 ft (3.935 m), from rating curve extended above 5,800 ft³/s (164 m³/s) on basis of velocity-area studies; minimum observed, 20 ft³/s (0.57 m³/s) Aug. 11, 14, 28, 1934.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,700 ft³/s (105 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 17	1500	*9,060	257	8.76	2.670	May 10	0300	4,190	119	6.22	1.896
Jan. 9	1500	Ice Jam		*8.84	2.694						

Minimum discharge, 40 ft³/s (1.13 m³/s) Aug. 21, 23, 24, gage height, 1.03 ft (0.314 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	688	228	384	190	370	120	1280	943	522	85	109	75
2	2010	217	735	180	350	110	1450	726	356	75	122	64
3	1300	206	554	170	310	96	737	621	308	71	100	56
4	1180	268	434	160	280	88	604	610	261	68	112	56
5	781	592	344	160	270	78	904	720	237	64	117	52
6	578	557	301	150	280	74	828	923	271	61	98	48
7	433	436	270	160	290	74	779	1040	227	58	132	52
8	346	384	260	400	270	76	720	1490	324	58	109	53
9	847	835	250	1000	250	92	580	3250	377	89	91	46
10	1170	554	240	860	260	100	551	3050	312	91	83	44
11	716	1970	230	700	280	100	1230	1720	247	75	68	45
12	549	1110	230	580	280	100	2310	1580	203	66	68	151
13	433	735	290	560	260	120	2320	1760	186	63	77	244
14	344	559	410	540	250	230	2220	1830	212	59	64	164
15	476	454	560	500	230	300	1220	1550	206	58	56	125
16	536	442	330	490	220	370	910	1580	169	58	53	109
17	4210	473	230	470	210	280	809	2300	149	79	56	112
18	2480	571	250	450	200	230	797	1550	156	68	55	93
19	1450	476	230	440	190	200	930	1350	180	59	49	85
20	1150	384	210	420	180	210	1120	1420	227	56	48	77
21	920	360	200	380	180	220	1100	1630	200	53	46	71
22	796	376	190	350	170	240	943	1130	175	53	44	70
23	667	344	170	330	170	250	997	852	154	52	41	64
24	518	366	200	310	190	220	1060	749	137	52	58	61
25	438	348	230	340	170	200	1240	658	122	46	93	56
26	390	371	260	540	160	220	1190	574	109	44	77	55
27	354	310	240	720	150	450	1450	501	107	46	66	52
28	316	281	230	600	140	1100	1640	424	122	175	59	56
29	286	278	220	490	---	1870	1650	369	109	132	91	55
30	262	265	230	440	---	1450	1420	356	102	137	117	53
31	243	---	210	400	---	1270	---	382	---	127	89	---
TOTAL	26867	14750	9122	13480	6560	10538	34989	37638	6467	2278	2448	2344
MEAN	867	492	294	435	234	340	1166	1214	216	73.5	79.0	78.1
MAX	4210	1970	735	1000	370	1870	2320	3250	522	175	132	244
MIN	243	206	170	150	140	74	551	356	102	44	41	44
CFSM	4.38	2.49	1.49	2.20	1.18	1.72	5.89	6.13	1.09	.37	.40	.39
IN.	5.05	2.77	1.71	2.53	1.23	1.98	6.57	7.07	1.22	.43	.46	.44

CAL YR 1977 TOTAL 157067 MEAN 430 MAX 4880 MIN 52 CFSM 2.17 IN 29.51
WTR YR 1978 TOTAL 167481 MEAN 459 MAX 4210 MIN 41 CFSM 2.32 IN 31.47

04278000 LAKE GEORGE AT ROGERS ROCK, NY

LOCATION.--Lat 43°48'28", long 73°27'30", Essex County, Hydrologic Unit 02010001, on west shore about 500 ft (152 m) north of Hooper's dock at Rogers Rock, and 0.4 mi (0.6 km) west of Baldwin.

DRAINAGE AREA.--233 mi² (603 km²) at outlet at Ticonderoga.

PERIOD OF RECORD.--July 1913 to current year.

GAGE.--Water-stage recorder. Datum of gage is 315.93 ft (96.295 m) National Geodetic Vertical Datum, adjustment of 1912. Prior to Nov. 4, 1929, nonrecording gages at several sites within a half mile of present site at same datum. Nov. 4, 1929 to Sept. 26, 1936, nonrecording gage at present site and datum.

REMARKS.--Elevation of lake regulated by floodgates at Ticonderoga. Prior to October 1974, lake was regulated by powerplant wheel gate and floodgates. Lake George has been controlled by a dam at its outlet for more than 100 years. Area of water surface is 44 mi² (114 km²).

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height observed, 5.09 ft (1.551 m) Apr. 9, 1936; minimum, 0.64 ft (0.195 m) Dec. 20, 1941.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 4.01 ft (1.222 m) Oct. 18; minimum, 2.44 ft (0.744 m) Mar. 14.

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.47	3.33	3.46	2.96	3.41	2.63	3.32	3.70	3.69	3.62	3.48	3.30
2	3.58	3.32	3.56	3.01	3.34	2.61	3.39	3.64	3.73	3.59	3.47	3.32
3	3.63	3.33	3.56	3.03	3.32	2.60	3.40	3.59	3.80	3.57	3.50	3.30
4	3.64	3.33	3.53	3.04	3.28	2.59	3.40	3.60	3.80	3.54	3.50	3.24
5	3.62	3.29	3.45	3.00	3.24	2.57	3.46	3.62	3.82	3.51	3.49	3.25
6	3.57	3.36	3.50	2.97	3.19	2.56	3.46	3.64	3.79	3.52	3.48	3.28
7	3.47	3.33	3.52	2.98	3.18	2.51	3.51	3.64	3.79	3.53	3.45	3.13
8	3.46	3.37	3.46	3.04	3.16	2.50	3.54	3.68	3.83	3.51	3.49	3.19
9	3.53	3.48	3.49	3.36	3.14	2.50	3.52	3.73	3.80	3.49	3.49	3.09
10	3.66	3.52	3.41	3.51	3.09	2.49	3.53	3.77	3.76	3.51	3.45	3.13
11	3.67	3.64	3.35	3.52	3.07	2.49	3.56	3.77	3.75	3.46	3.44	3.19
12	3.69	3.61	3.28	3.47	3.03	2.49	3.68	3.77	3.71	3.44	3.47	3.21
13	3.61	3.61	3.25	3.46	2.98	2.50	3.76	3.76	3.69	3.45	3.51	3.18
14	3.57	3.64	3.26	3.44	2.94	2.55	3.85	3.71	3.64	3.43	3.50	3.22
15	3.65	3.63	3.23	3.47	2.91	2.60	3.87	3.70	3.61	3.45	3.49	3.25
16	3.65	3.61	3.24	3.45	2.89	2.58	3.87	3.75	3.55	3.45	3.52	3.20
17	3.76	3.62	3.17	3.42	2.85	2.59	3.87	3.82	3.59	3.45	3.52	3.15
18	3.97	3.65	3.13	3.46	2.83	2.60	3.86	3.83	3.58	3.46	3.46	3.12
19	3.88	3.61	3.11	3.47	2.82	2.61	3.86	3.82	3.57	3.47	3.47	3.13
20	3.76	3.56	3.08	3.46	2.81	2.57	3.89	3.81	3.60	3.48	3.40	3.16
21	3.77	3.57	3.11	3.49	2.78	2.58	3.95	3.77	3.59	3.47	3.38	3.16
22	3.73	3.49	3.17	3.48	2.76	2.61	3.91	3.72	3.72	3.46	3.39	3.09
23	3.65	3.44	3.15	3.45	2.76	2.63	3.93	3.69	3.72	3.48	3.37	3.11
24	3.65	3.45	3.09	3.41	2.74	2.65	3.90	3.68	3.69	3.39	3.34	3.14
25	3.58	3.39	3.09	3.37	2.70	2.65	3.87	3.64	3.71	3.44	3.37	3.10
26	3.55	3.48	3.09	3.43	2.69	2.67	3.84	3.65	3.72	3.44	3.38	3.08
27	3.48	3.48	3.07	3.51	2.68	2.88	3.81	3.67	3.73	3.45	3.34	3.10
28	3.40	3.44	3.02	3.49	2.65	3.13	3.78	3.68	3.70	3.48	3.36	3.05
29	3.38	3.39	3.00	3.48	---	3.22	3.78	3.69	3.70	3.46	3.38	3.03
30	3.34	3.37	2.99	3.44	---	3.25	3.73	3.68	3.65	3.42	3.34	3.05
31	3.33	---	2.94	3.42	---	3.28	---	3.71	---	3.46	3.33	---
MEAN	3.60	3.48	3.25	3.34	2.97	2.67	3.70	3.71	3.70	3.48	3.44	3.17
MAX	3.97	3.65	3.56	3.52	3.41	3.28	3.95	3.83	3.83	3.62	3.52	3.32
MIN	3.33	3.29	2.94	2.96	2.65	2.49	3.32	3.54	3.55	3.39	3.33	3.03

CAL YR 1977 MEAN 3.53 MAX 4.98 MIN 2.75
WTR YR 1978 MEAN 3.38 MAX 3.97 MIN 2.49

04278300 NORTHWEST BAY BROOK NEAR BOLTON LANDING, NY

LOCATION.--Lat 43°39'48", long 73"36'14", Warren County, Hydrologic Unit 02010001, on left bank 10 ft (3 m) downstream from county bridge on Padanarum Road, 7.7 mi (12.4 km) north of Bolton Landing.

DRAINAGE AREA.--23.4 mi² (61.6 km²).

PERIOD OF RECORD.--October 1965 to September 1968, October 1971 to current year. Annual maximum, water years 1969-71.

GAGE.--Water-stage recorder. Datum of gage is 423.60 ft (129.113 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1973, at datum 1.00 ft (0.305 m) higher.

REMARKS.--Records fair except those for winter periods, which are poor.

AVERAGE DISCHARGE.--10 years (1966-68, 1972-78), 38.6 ft³/s (1.093 m³/s), 22.40 in/yr (569 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,650 ft³/s (46.7 m³/s) Dec. 21, 1973, gage height, 6.15 ft (1.875 m) from rating curve extended above 190 ft³/s (5.38 m³/s) on basis of slope-area measurement at gage height 5.53 ft (1.686 m); maximum gage height, 6.82 ft (2.079 m) Jan. 27, 1976 (ice jam); minimum discharge recorded, 0.28 ft³/s (0.008 m³/s) Sept. 27, 28, 29, 1968, gage height, 1.18 ft (0.360 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 400 ft³/s (11 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 17	1315	933	26.4	4.81	1.466
Jan. 9	1145	*1,290	36.5	*5.54	1.689
Jan. 26	2230	ice jam		4.29	1.308
Mar. 27	1730	ice jam		4.75	1.448
Apr. 13	1900	555	15.7	3.84	1.170

Minimum discharge, 1.6 ft³/s (0.045 m³/s) Sept. 9, 10, gage height, 0.73 ft (0.223 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	91	21	80	14	38	15	138	39	35	4.7	8.6	2.3
2	182	21	107	13	35	9.4	155	35	23	4.4	6.7	2.1
3	80	19	76	13	32	4.5	109	30	36	3.9	5.9	2.1
4	60	19	45	13	34	4.2	80	28	30	3.5	11	2.3
5	45	21	38	13	32	4.0	133	26	23	3.2	7.2	2.1
6	35	34	33	14	27	3.6	133	24	20	2.9	5.5	1.8
7	28	31	28	15	23	3.4	131	23	19	2.7	5.1	2.0
8	24	47	27	16	20	3.1	100	21	77	2.4	5.1	1.7
9	142	102	27	615	18	2.9	96	35	59	2.3	4.4	1.6
10	138	65	28	220	16	2.7	115	40	44	2.2	4.2	1.6
11	73	149	29	180	14	2.5	239	31	32	2.2	3.7	3.2
12	59	90	32	130	13	2.6	380	27	25	2.1	11	13
13	49	66	34	90	12	2.7	354	25	26	2.0	9.5	6.9
14	49	56	37	72	11	8.0	291	25	25	38	6.4	4.4
15	146	49	54	58	9.4	18	182	34	19	51	5.1	3.9
16	98	45	40	54	8.0	13	138	41	15	28	4.4	3.7
17	450	48	34	50	7.2	10	126	82	14	52	4.2	3.9
18	214	56	29	43	6.6	9.0	129	65	14	30	3.7	3.1
19	121	49	27	40	6.1	8.4	138	54	14	15	3.4	3.2
20	85	42	26	36	6.8	7.6	165	45	14	9.9	3.1	2.8
21	66	39	27	33	6.2	8.6	155	46	13	7.7	2.8	2.8
22	56	36	28	28	5.6	12	121	37	28	6.9	2.4	2.9
23	49	34	25	26	5.0	14	107	31	15	5.7	2.3	2.5
24	[illegible]	41	23	24	4.7	16	93	27	12	4.9	2.8	2.4
25	[illegible]	39	27	27	4.5	19	85	24	9.9	4.2	4.0	2.4
26	35	63	45	300	4.1	17	73	21	8.6	3.7	3.2	2.5
27	32	55	36	370	3.9	422	64	18	8.3	4.4	2.8	2.5
28	30	44	23	140	7.0	354	60	15	7.4	11	2.8	2.5
29	26	38	18	70	---	151	52	13	6.7	6.2	3.1	2.7
30	24	35	16	50	---	113	46	11	5.5	8.0	2.5	2.7
31	23	---	15	45	---	102	---	25	---	5.9	2.4	---
TOTAL	2591	1454	1114	2812	410.1	1363.3	4188	998	678.4	331.0	149.3	93.6
MEAN	83.6	48.5	35.9	90.7	14.6	44.0	140	32.2	22.6	10.7	4.82	3.12
MAX	450	149	107	615	38	422	380	82	77	52	11	13
MIN	23	19	15	13	3.9	2.6	46	11	5.5	2.0	2.3	1.6
CFSM	3.57	2.07	1.53	3.88	.62	1.88	5.98	1.38	.97	.46	.21	.13
IN.	4.12	2.31	1.77	4.47	.65	2.17	6.66	1.59	1.08	.53	.24	.15

CAL YR 1977 TOTAL 14553.73 MEAN 39.9 MAX 893 MIN .60 CFSM 1.71 IN 23.14
WTR YR 1978 TOTAL 16182.70 MEAN 44.3 MAX 615 MIN 1.6 CFSM 1.89 IN 25.73

04279000 LA CHUTE AT TICONDEROGA, NY

LOCATION.--Lat 43°50'38", long 73°25'57", Essex County, Hydrologic Unit 02010001, on right bank 250 ft (76 m) downstream from International Paper Co. "C" Mill dam, at Ticonderoga, 250 ft (76 m) upstream from Trout Brook, and 0.5 mi (0.8 km) downstream from upper ("A" Mill) dam.

DRAINAGE AREA.--234 mi^2 (606 km^2).

PERIOD OF RECORD.--August 1904 to December 1905, October 1942 to current year. Prior to October 1973, published as "Lake George Outlet at Ticonderoga."

REVISED RECORDS.--WRD NY 1971: 1970.

GAGE.--Water-stage recorder and concrete control on river channel. Datum of gage is 190.41 ft (58.037 m) National Geodetic Vertical Datum of 1929. Prior to June 25, 1971, turbine gate-opening recorder in powerplant at "C" Mill dam. Prior to Dec. 31, 1905, nonrecording gage at site 2,000 ft (610 m) upstream at different datum.

REMARKS.--Records fair. Prior to June 25, 1971, discharge in tailrace determined from rating for turbine gage developed from discharge measurements. Since June 25, 1971, leakage through inoperative turbine gate determined from periodic discharge measurements. Records represent total discharge from Lake George and include flow in river channel and in tailrace. Flow regulated by Lake George (see station 04278000).

AVERAGE DISCHARGE.--36 years (1942-78), 312 ft^3/s (8.836 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 1,370 ft^3/s (38.8 m^3/s) Mar. 17, 1977; minimum daily, 0.50 ft^3/s (0.014 m^3/s) Sept. 9, 1976.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 1,110 ft^3/s (31.4 m^3/s) Apr. 21; minimum daily, 12 ft^3/s (0.34 m^3/s) July 31, Aug. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	265	106	589	108	861	394	861	1000	60	221	12	49
2	265	103	709	114	842	394	870	984	71	354	46	49
3	492	103	709	114	832	394	870	537	75	347	48	49
4	709	103	691	114	823	394	880	49	71	528	48	48
5	700	103	737	114	813	394	900	51	279	405	51	49
6	700	106	870	111	804	394	900	53	537	75	51	49
7	580	108	890	111	785	387	921	53	528	45	51	73
8	340	108	861	114	795	340	921	62	715	22	51	75
9	353	114	880	580	804	244	910	71	891	20	51	64
10	353	114	851	890	785	244	921	309	881	21	45	64
11	353	130	823	890	785	239	942	528	881	20	33	67
12	530	124	804	870	775	173	973	528	871	20	36	67
13	709	117	785	870	756	103	1010	528	725	20	42	64
14	700	224	795	842	747	100	1030	502	520	29	45	60
15	718	380	785	870	737	229	1040	511	511	35	42	59
16	718	380	795	870	728	366	1040	528	315	33	45	59
17	842	373	766	851	606	366	1040	776	59	27	46	57
18	1010	546	756	851	424	366	1040	1050	59	20	48	57
19	995	728	747	861	424	366	1050	1050	57	20	57	53
20	973	718	747	842	409	360	1050	1040	59	20	57	53
21	1010	728	747	861	409	373	1080	1020	55	33	55	40
22	995	700	775	870	416	380	1060	1000	67	39	53	33
23	952	691	785	861	416	373	1070	767	64	37	53	39
24	952	691	756	851	416	366	1060	502	60	36	53	42
25	942	682	756	842	409	353	1050	328	67	40	55	42
26	942	709	756	870	409	360	1040	59	69	36	55	42
27	842	709	737	890	409	522	1040	60	71	37	53	45
28	700	691	718	890	402	813	1020	62	64	31	51	48
29	682	682	530	880	---	823	1030	64	62	15	53	46
30	665	682	114	870	---	832	1020	62	57	13	51	48
31	424	---	114	861	---	842	---	67	---	12	51	---
TOTAL	21411	11753	22378	20533	17821	12284	29639	14201	8801	2611	1488	1590
MEAN	691	392	722	662	636	396	988	458	293	84.2	48.0	53.0
MAX	1010	728	890	890	861	842	1080	1050	891	528	57	75
MIN	265	103	114	108	402	100	861	49	55	12	12	33

CAL YR 1977 TOTAL 149042 MEAN 408 MAX 1370 MIN 17
WTR YR 1978 TOTAL 164510 MEAN 451 MAX 1080 MIN 12

04294500 LAKE CHAMPLAIN AT BURLINGTON, VT

LOCATION.--Lat 44°28'52", long 73°13'27", Chittenden County, Hydrologic Unit 02010003, 50 ft (15 m) south of Gulf Oil Co. dock at Burlington, 0.1 mi (0.2 km) north of Burlington Water Department pumping station, and 0.5 mi (0.8 km) north of railroad station.

PERIOD OF RECORD.--Gage heights: May 1907 to current year.
Water-quality records: Water year 1971.

REVISED RECORDS.--WSP 684: 1912-29 (datum correction). WSP 1207: 1938 (datum correction).

GAGE.--Water-stage recorder. Datum of gage is 92.86 ft (28.304 m) National Geodetic Vertical Datum of 1929. Prior to July 20, 1937, nonrecording gage at site 0.7 mi (1.1 km) south, and July 20, 1937, to Sept. 7, 1939, nonrecording gage at site 0.1 mi (0.2 km) south, both at present datum.

REMARKS.--Several observations of water temperature were made during the year.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 8.80 ft (2.682 m) Apr. 4, 1976; minimum observed, -0.25 ft (-0.076 m) Dec. 4, 1908.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 7.78 ft (2.371 m) Apr. 29, 30, affected by seiche; minimum, 1.16 ft (0.354 m) Sept. 30.

MEAN GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.22	5.69	5.09	4.59	5.30	3.92	4.74	7.70	5.45	4.33	2.64	1.94
2	3.56	5.59	5.16	4.55	5.27	3.86	4.96	7.64	5.34	4.28	2.61	1.89
3	3.92	5.52	5.25	4.49	5.23	3.81	5.16	7.57	5.26	4.21	2.59	1.84
4	4.21	5.40	5.28	4.42	5.20	3.77	5.26	7.47	5.17	4.13	2.62	1.82
5	4.33	5.30	5.27	4.37	5.15	3.71	5.43	7.38	5.06	4.04	2.59	1.82
6	4.39	5.35	5.35	4.33	5.07	3.66	5.66	7.26	4.99	3.97	2.56	1.78
7	4.41	5.35	5.30	4.27	5.02	3.62	5.83	7.19	4.88	3.89	2.54	1.73
8	4.50	5.37	5.21	4.14	5.02	3.58	5.94	7.10	4.87	3.83	2.53	1.73
9	4.54	5.31	5.11	4.35	4.98	3.53	6.01	7.03	4.84	3.78	2.49	1.70
10	4.53	5.34	5.09	4.69	4.93	3.50	6.02	7.08	4.80	3.72	2.48	1.70
11	4.68	5.45	5.05	4.87	4.89	3.42	6.07	7.11	4.73	3.65	2.46	1.65
12	4.68	5.44	4.99	4.98	4.83	3.38	6.28	7.07	4.65	3.59	2.42	1.61
13	4.62	5.33	4.95	5.03	4.76	3.33	6.53	7.01	4.63	3.53	2.39	1.62
14	4.62	5.38	4.92	4.99	4.71	3.27	6.82	6.98	4.61	3.44	2.39	1.76
15	4.69	5.48	4.99	5.11	4.67	3.24	7.06	6.90	4.58	3.37	2.37	1.70
16	4.80	5.42	5.02	5.11	4.62	3.31	7.16	6.86	4.57	3.32	2.33	1.61
17	4.83	5.31	5.04	5.09	4.56	3.31	7.20	6.83	4.46	3.31	2.30	1.57
18	5.66	5.35	5.03	5.10	4.51	3.26	7.23	6.74	4.35	3.28	2.29	1.54
19	5.99	5.33	5.01	5.14	4.45	3.24	7.27	6.65	4.40	3.22	2.27	1.55
20	6.06	5.39	4.97	5.06	4.39	3.24	7.38	6.58	4.47	3.15	2.22	1.52
21	6.22	5.40	4.96	5.13	4.34	3.22	7.51	6.52	4.58	3.12	2.20	1.50
22	6.18	5.27	4.95	5.14	4.28	3.27	7.60	6.46	4.69	3.10	2.17	1.51
23	6.16	5.27	4.89	5.09	4.22	3.36	7.65	6.40	4.73	3.06	2.12	1.49
24	6.20	5.18	4.85	5.08	4.17	3.43	7.67	6.29	4.73	3.00	2.12	1.46
25	6.15	5.20	4.82	4.99	4.12	3.48	7.69	6.18	4.69	2.96	2.11	1.44
26	6.15	5.23	4.85	5.02	4.07	3.53	7.70	6.09	4.61	2.86	2.05	1.42
27	5.99	5.21	4.82	5.12	4.01	3.65	7.71	5.96	4.52	2.77	2.02	1.31
28	5.90	5.22	4.80	5.18	3.97	3.87	7.74	5.84	4.49	2.78	1.98	1.31
29	5.83	5.18	4.74	5.26	---	4.17	7.76	5.73	4.45	2.77	1.96	1.31
30	5.76	5.12	4.69	5.29	---	4.41	7.74	5.61	4.40	2.75	1.97	1.24
31	5.73	---	4.65	5.30	---	4.58	---	5.51	---	2.71	1.97	---
MEAN	5.11	5.35	5.00	4.88	4.67	3.58	6.69	6.73	4.73	3.42	2.31	1.60
MAX	6.22	5.69	5.35	5.30	5.30	4.58	7.76	7.70	5.45	4.33	2.64	1.94
MIN	3.22	5.12	4.65	4.14	3.97	3.22	4.74	5.51	4.35	2.71	1.96	1.24

CAL YR 1977 MEAN 3.92 MAX 7.16 MIN 1.81
WTR YR 1978 MEAN 4.50 MAX 7.76 MIN 1.24

NOTE.--No gage-height record Oct. 8 to Nov. 21, Jan. 10 to Feb. 14.

04295000 RICHELIEU RIVER (LAKE CHAMPLAIN) AT ROUSES POINT, NY
(National stream-quality accounting network station)
(National pesticide network station)

LOCATION.--Lat 44°59'46", long 73°21'37", Clinton County, Hydrologic Unit 02010006, on left bank at outlet of Lake Champlain in Rouses Point, and 1.0 mi (1.6 km) south of Fort Montgomery ruins. Water-quality sampling site at stage station.

DRAINAGE AREA.--8,277 mi^2 (21,437 km^2).

WATER-STAGE RECORDS

PERIOD OF RECORD.--October 1863 to December 1870 (maximum and minimum monthly gage heights at St. Johns, Quebec, published in WSP 97) and March 1871 to current year (daily gage heights prior to October 1970, elevations thereafter: those for 1871-1907 published in WSP 894). Gage heights prior to Oct. 1, 1925, published as "Richelieu River at Fort Montgomery, Rouses Point." Discharge records for January 1875 to September 1916 at "Chambly, Quebec," published in WSP 65, 82, 97, 129, 170, 206, 424, and 1307 have been found to be unreliable and should not be used. Daily discharge record for "Richelieu River at Fryers Rapids, Quebec," published in Water Survey of Canada annual reports.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. March 1871 to May 1923, nonrecording gage located in Fort Montgomery and May 1923 to October 1938, nonrecording gage at present site. Prior to October 1970, at datum 93.00 ft (28.346 m) higher.

REMARKS.--Area of lake surface about 490 mi^2 (1,269 km^2). Total volume below 92.5 ft (28.19 m) elevation, reported by Lake Champlain Studies Center, 902.2 bil ft^3 (25,600 hm^3).

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 101.80 ft (31.029 m) Mar. 30, 1903; minimum observed, 92.17 ft (28.093 m) Oct. 23, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum elevation known since at least 1827, 102.1 ft (31.12 m) May 4, 1869, from marks at railroad bridge near present gage, according to data published on p. 428 of the Report of the Board of Engineers on Deep Waterways, 1900: U.S. 56th Cong., 2d sess. H. Doc. 149.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 100.61 ft (30.67 m) Apr. 29, minimum, 93.96 ft (28.64 m) Sept. 28.

ELEVATION, IN FEET ABOVE NGVD, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	96.04	98.47	98.10	97.39	98.12	96.72	97.63	100.49	98.27	97.10	95.68	94.75
2	96.38	98.41	98.05	97.37	98.09	96.67	97.76	100.42	98.28	97.07	95.59	94.81
3	96.74	98.34	98.10	97.33	98.05	96.62	97.98	100.35	98.11	97.03	95.57	94.77
4	96.97	98.22	98.09	97.33	98.02	96.58	98.13	100.28	98.00	96.98	95.48	94.65
5	97.20	98.12	98.04	97.19	97.97	96.53	98.26	100.20	97.99	96.93	95.51	94.58
6	97.23	98.17	97.99	97.12	97.89	96.48	98.48	100.11	97.87	96.87	95.47	94.71
7	97.20	98.17	98.02	97.12	97.84	96.43	98.67	100.01	97.88	96.80	95.41	94.53
8	97.32	98.19	98.02	97.22	97.84	96.38	98.76	100.01	97.75	96.74	95.39	94.56
9	97.36	98.13	98.18	97.17	97.80	96.34	98.82	100.02	97.65	96.66	95.45	94.41
10	97.35	98.16	97.83	97.51	97.75	96.27	98.85	99.94	97.63	96.59	95.33	94.54
11	97.57	98.27	97.85	97.69	97.71	96.24	98.97	99.94	97.74	96.46	95.32	94.61
12	97.50	98.26	97.82	97.80	97.65	96.19	99.12	99.94	97.64	96.40	95.39	94.43
13	97.44	98.15	97.76	97.85	97.58	96.16	99.41	99.91	97.50	96.41	95.33	94.44
14	97.44	98.20	97.82	97.81	97.53	96.20	99.67	99.82	97.43	96.34	95.27	94.58
15	97.51	98.30	97.78	97.93	97.49	96.12	99.87	99.71	97.39	96.30	95.26	94.83
16	97.62	98.24	97.83	97.93	97.43	96.12	99.98	99.65	97.40	96.25	95.30	94.43
17	97.65	98.13	97.84	97.91	97.37	96.13	100.03	99.64	97.58	96.14	95.26	94.39
18	98.48	98.17	97.83	97.92	97.31	96.14	100.05	99.59	97.44	96.11	95.14	94.36
19	98.81	98.15	97.81	97.96	97.26	96.13	100.10	99.53	97.26	96.10	95.18	94.34
20	98.88	98.21	97.82	97.88	97.20	96.09	100.18	99.45	97.37	96.10	95.07	94.39
21	99.04	94.52	97.80	97.95	97.15	96.09	100.32	99.31	97.43	96.00	95.00	94.39
22	99.00	98.06	97.81	97.96	97.10	96.11	100.38	99.28	97.54	95.94	95.01	94.33
23	98.98	98.12	97.85	97.91	97.04	96.21	100.43	99.23	97.60	95.92	94.97	94.33
24	99.02	98.19	97.75	97.90	96.99	96.25	100.47	99.16	97.55	95.84	94.92	94.37
25	98.97	97.99	97.71	97.81	96.93	96.32	100.49	99.04	97.56	95.87	94.96	94.24
26	98.97	98.03	97.69	97.84	96.88	96.37	100.51	98.93	97.57	95.95	94.94	94.29
27	98.81	98.03	97.73	97.94	96.82	96.49	100.49	98.84	97.48	95.96	94.87	94.51
28	98.72	98.02	97.64	98.00	96.76	96.80	100.51	98.72	97.33	95.69	95.04	94.20
29	98.65	98.00	97.62	98.08	---	97.02	100.53	98.60	97.31	95.68	94.89	94.19
30	98.58	97.99	97.55	98.11	---	97.25	100.50	98.48	97.17	95.55	94.83	94.40
31	98.55	---	97.44	98.12	---	97.43	---	98.40	---	95.63	94.77	---
MEAN	97.93	98.18	97.84	97.71	97.48	96.42	99.51	99.58	97.62	96.30	95.21	94.48
MAX	99.04	98.52	98.18	98.12	98.12	97.43	100.53	100.49	98.28	97.10	95.68	94.83
MIN	96.04	97.99	97.44	97.12	96.76	96.09	97.63	98.40	97.17	95.55	94.77	94.19

CAL YR 1977 MEAN 96.77 MAX 100.13 MIN 94.65
WTR YR 1978 MEAN 97.35 MAX 100.53 MIN 94.19

04295000 RICHELIEU RIVER (LAKE CHAMPLAIN) AT ROUSES POINT, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1966-67, 1969-72, 1974 to current year.
CHEMICAL DATA: 1966-67 (a), 1969 (b), 1970 (c), 1971-72 (b), 1974-78 (c).
MINOR ELEMENTS DATA: 1974-78 (b).
PESTICIDE DATA: 1976-77 (b), 1978 (a).
ORGANIC DATA: TOC--1974 (a), 1975-77 (b), 1978 (a).
PCB--1978 (a).
NUTRIENT DATA: 1970 (c), 1971-72 (b), 1974 (b), 1975-78 (c).
BIOLOGICAL DATA:
Coliform bacteria--1974 (a), 1975-78 (c).
Phytoplankton--1974 (a), 1975-78 (c).
Periphyton--1975 (c), 1976-78 (b).
SEDIMENT DATA: 1975-78 (c).

COOPERATION.--Pesticide samples were collected by the U.S. Geological Survey and were analyzed by the Environmental Protection Agency.

WATER QUALITY DATA, WATER YEAR, OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)
OCT 11...	1100	160	7.2	11.0	1	--	9.8	90	22	K9	65
NOV 01...	1045	170	7.1	10.0	1	--	10.2	91	K3	K3	57
APR 18...	1130	150	7.4	5.0	2	--	8.0	63	<1	100	53
MAY 15...	1200	150	7.7	10.0	2	--	10.0	89	K1	K3	52
JUN 12...	1000	140	7.5	19.0	--	2.0	7.5	82	K12	K1	49
JUL 11...	1230	135	7.7	21.0	--	1.0	8.3	93	K18	39	53
AUG 08...	1100	136	7.5	25.0	--	1.0	8.3	98	K2	K2	53
SEP 05...	1145	140	7.5	20.0	--	1.0	8.5	93	K8	K1	52

DATE	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT 11...	24	19	4.2	5.0	1.5	50	0	41	13	7.0	.0
NOV 01...	10	16	4.1	4.9	1.4	57	0	47	14	6.9	.0
APR 18...	13	15	3.7	4.6	1.4	49	0	40	13	6.7	.0
MAY 15...	13	15	3.5	4.7	1.2	47	0	39	13	6.6	.0
JUN 12...	--	14	3.4	4.6	1.3	--	--	33	11	6.8	.0
JUL 11...	13	15	3.7	4.8	1.3	--	--	40	11	6.0	.0
AUG 08...	14	15	3.7	4.6	1.2	--	--	39	12	7.0	.0
SEP 05...	12	15	3.6	5.0	1.2	--	--	40	13	6.6	.0

K Results based on colony count outside the acceptable range (non-ideal colony count).

04295000 RICHELIEU RIVER (LAKE CHAMPLAIN) AT ROUSES POINT, NY--Continued

WATER QUALITY DATA, WATER YEAR, OCTOBER 1977 TO SEPTEMBER 1978

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)
OCT											
11...	1.3	87	76	.20	--	--	.26	--	.46	.00	--
NOV											
01...	1.0	70	76	.17	--	--	.46	--	.63	.03	--
APR											
18...	2.0	91	71	.26	.04	.21	.25	.23	.51	.01	.01
MAY											
15...	1.4	80	69	.19	.01	.31	.32	.26	.51	.02	.00
JUN											
12...	1.2	74	--	.11	.02	.55	.57	.30	.68	.02	.00
JUL											
11...	.1	88	66	2.0	.41	.00	.24	.28	2.2	.01	.00
AUG											
08...	.8	88	68	.00	.01	.31	.32	.04	.32	.02	.00
SEP											
05...	1.2	88	70	.00	.01	.35	.36	.22	.36	.01	.01

DATE	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)
OCT , 1977									
11...	0	0	--	--	0	0	<10	1	5
APR , 1978									
18...	1	1	0	0	0	0	<10	1	0
JUL									
11...	0	0	0	--	0	0	10	0	0
SEP									
05...	1	0	0	0	1	0	100	0	5

DATE	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
OCT , 1977									
11...	0	5	3	110	80	17	0	10	0
APR , 1978									
18...	2	2	2	90	20	7	0	0	0
JUL									
11...	0	2	0	100	0	3	0	10	10
SEP									
05...	1	5	2	580	30	10	2	20	0

DATE	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
OCT , 1977								
11...	<.5	<.5	0	0	--	--	20	10
APR , 1978								
18...	<.5	<.5	0	0	1	1	10	0
JUL								
11...	.5	.5	0	0	0	0	10	10
SEP								
05...	<.5	<.5	0	0	0	0	10	10

04295000 RICHELIEU RIVER (LAKE CHAMPLAIN) AT ROUSES POINT, NY--Continued

WATER QUALITY DATA, WATER YEAR, OCTOBER 1977 TO SEPTEMBER 1978

DATE	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	PCB, TOTAL (UG/L)	AROCLOR TOTAL 1254 PCB SERIES (UG/L)	AROCLOR TOT. IN BOT MAT 1254 PCB SERIES (UG/KG)	ATRAZINE, TOTAL IN BOTTOM MATERIAL (UG/KG)	ALDRIN, TOTAL (UG/L)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL (UG/L)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL (UG/L)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)
NOV												
01...	7.0	--	ND	--	4	ND	ND	ND	ND	ND	ND	ND
APR												
18...	--	1.5	--	.0	7	--	ND	ND	ND	ND	ND	ND

DATE	DDE, TOTAL (UG/L)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	P,P' DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL (UG/L)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL (UG/L)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN TOTAL (UG/L)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL (UG/L)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL (UG/L)
NOV												
01...	ND	1.6	--	ND	ND	ND	ND	ND	ND	ND	ND	ND
APR												
18...	ND	--	3.2	ND	ND	ND	ND	ND	ND	ND	ND	ND

DATE	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL (UG/L)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE TOTAL (UG/L)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL (UG/L)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL (UG/L)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOTAL (UG/L)	METHYL PARATHION, TOTAL (UG/L)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG)
NOV												
01...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
APR												
18...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

DATE	METHYL TRITHION, TOTAL (UG/L)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG)	PARATHION, TOTAL (UG/L)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	SIMAZINE IN BOTTOM MATERIAL (UG/KG DRY SOLIDS)	TOXAPHENE, TOTAL (UG/L)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)	TOTAL TRITHION (UG/L)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	2,4-D, TOTAL IN BOTTOM MATERIAL (UG/KG)	2,4,5-T TOTAL IN BOTTOM MATERIAL (UG/KG)	SILVEX, TOTAL IN BOTTOM MATERIAL (UG/KG)
NOV												
01...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
APR												
18...	ND	ND	ND	ND	--	ND	ND	ND	ND	--	--	--

ND Material specifically analyzed for, but not detected.

SUSPENDED-SEDIMENT MEASUREMENTS, WATER YEAR, OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SEDIMENT, SUSPENDED (MG/L)	DATE	TIME	SEDIMENT, SUSPENDED (MG/L)
OCT			JUN		
11...	1100	1	12...	1000	10
NOV			JUL		
01...	1045	1	11...	1230	18
APR			AUG		
18...	1130	2	08...	1100	40
MAY			SEP		
15...	1200	4	05...	1145	10

04295000 RICHELIEU RIVER (LAKE CHAMPLAIN) AT ROUSES POINT, NY--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

PHYTOPLANKTON

DATE	OCT 11,77		NOV 1,77		APR 18,78		MAY 15,78		JUN 12,78	
TIME	1100		1045		1130		1200		1000	
TOTAL CELLS/ML	570		200		450		1100		160	
DIVERSITY: DIVISION	1.7		0.9		0.4		1.2		0.0	
.CLASS	1.9		0.9		0.4		1.2		0.0	
..ORDER	2.6		1.6		1.3		1.3		0.6	
...FAMILY	2.6		1.6		1.3		1.4		0.6	
....GENUS	3.2		1.6		1.3		1.7		0.6	
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)										
.CHLOROPHYCEAE										
..CHLOROCOCCALES										
...CHARACIACEAE										
....SCHROEDERIA	5	1	--	-	--	-	--	-	--	-
...OOCYSTACEAE										
....ANKISTRODESMUS	--	-	67#	33	--	-	--	-	--	-
....CHLORELLA	32	6	--	-	--	-	--	-	--	-
....KIRCHNERIELLA	--	-	--	-	--	-	38	3	--	-
...SCENEDESMACEAE										
....SCENEDESMUS	48	8	--	-	--	-	38	3	--	-
..VOLVOCALES										
...CHLAMYDOMONADACEAE										
....CHLAMYDOMONAS	5	1	--	-	--	-	--	-	--	-
CHRYSOPHYTA										
.BACILLARIOPHYCEAE										
..CENTRALES										
...COSCINODISCACEAE										
....CYCLOTELLA	70	12	--	-	--	-	110	10	--	-
....MELOSIRA	11	2	--	-	230#	52	230#	21	130#	86
....SKELETONEMA	22	4	--	-	--	-	--	-	--	-
....STEPHANODISCUS	--	-	67#	33	--	-	--	-	--	-
....THALASSIOSIRA	5	1	--	-	--	-	--	-	--	-
..PENNALES										
...ACHNANTHACEAE										
....COCCONEIS	--	-	67#	33	--	-	--	-	--	-
...FRAGILARIACEAE										
....ASTERIONELLA	43	8	--	-	190#	42	--	-	--	-
....FRAGILARIA	--	-	--	-	--	-	19	2	--	-
....SYNEDRA	5	1	--	-	--	-	--	-	--	-
...NAVICULACEAE										
....NAVICULA	--	-	--	-	--	-	--	-	22	14
.CHRYSOPHYCEAE										
..CHRYSOMONADALES										
...CHROMULINACEAE										
....CHRYSOCOCCUS	5	1	--	-	--	-	--	-	--	-
...MALLOMONADACEAE										
....MALLOMONAS	11	2	--	-	--	-	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)										
.CYANOPHYCEAE										
..CHROOCOCCALES										
...CHROOCOCCACEAE										
....ANACYSTIS	16	3	--	-	--	-	660#	60	--	-
....COCCOCHLORIS	59	10	--	-	--	-	--	-	--	-
..HORMOGONALES										
...OSCILLATORIACEAE										
....SCHIZOTHRIX	190#	34	--	-	--	-	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)										
.CRYPTOPHYCEAE										
..CRYPTOMONIDALES										
...CRYPTOCHRYSIDACEAE										
....RHODOMONAS	38	7	--	-	--	-	--	-	--	-
.EUGLENOPHYCEAE										
..EUGLENALES										
...EUGLENACEAE										
....EUGLENA	--	-	--	-	14	3	--	-	--	-
PYRRHOPHYTA (FIRE ALGAE)										
.DINOPHYCEAE										
..PERIDINIALES										
...PERIDINIACEAE										
....PERIDINIUM	--	-	--	-	14	3	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

04295000 RICHELIEU RIVER (LAKE CHAMPLAIN) AT ROUSES POINT, NY--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

PERIPHYTON

Dates of exposure	Length of exposure (days)	Biomass (g/m^2)		Chlorophyll a (mg/m^2)	Chlorophyll b (mg/m^2)	Sampling method
		Dry weight	Ash weight			
Aug. 9 to Sept. 6	28	1.73	0.944	0.052	0.469	Polyethylene strip
Sept. 6 to Oct. 11	35	1.10	.630	.147	.008	Polyethylene strip
June 12 to July 11	29	.079	.000	.900	.440	Polyethylene strip
July 11 to Aug. 8	28	.866	.315	1.95	.360	Polyethylene strip
Aug. 8 to Sept. 5	28	3.62	2.13	3.60	.810	Polyethylene strip
Sept. 5 to Oct. 2	27	8.66	6.30	8.82	1.06	Polyethylene strip

LAKES AND RESERVOIRS IN STREAMS TRIBUTARY TO ST. LAWRENCE RIVER

04260990 CRANBERRY LAKE AT CRANBERRY LAKE, NY--Lat 44°13'14", long 74°50'55", St. Lawrence County, Hydrologic Unit 04150302, on right wall at outlet structure, at village of Cranberry Lake. DRAINAGE AREA, 144 mi^2 (373 km^2). PERIOD OF RECORD, April 1923 to current year. GAGE, nonrecording gage read daily at 1200 hours. Datum of gage is 1,469.75 ft (447.980 m) National Geodetic Vertical Datum of 1929.

Dam completed in 1867 and controlled storage for which records are available began in 1923. Usable capacity above elevation 1,475.25 ft (449.656 m) is 2,530 mil ft^3 (71.6 hm^3). Crest at spillway is at elevation, 1,486.43 ft (453.064 m). Length of spillway is 110 ft (34 m). Area of water surface at crest elevation is 10.9 mi^2 (28.2 km^2). Records furnished by Oswegatchie River-Cranberry Reservoir Commission.

EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 2,985 mil ft^3 (84.5 hm^3) May 13-15, 1971, gage height, 18.5 ft (5.64 m); minimum observed, 70 mil ft^3 (1.98 hm^3) Apr. 1-4, 1956, gage height, 6.0 ft (1.83 m).

EXTREMES FOR CURRENT YEAR: Maximum contents observed, 2,440 mil ft^3 (69.1 hm^3) June 10-13, July 10, 11, gage height, 16.7 ft (5.09 m); minimum observed, 575 mil ft^3 (16.3 hm^3) Mar. 9-17, 20, 21, gage height, 8.9 ft (2.71 m).

04266700 CARRY FALLS RESERVOIR NEAR SOUTH COLTON, NY--Lat 44°26'07", long 74°44'50", St. Lawrence County, Hydrologic Unit 04150305, near center of upstream wall of dam between Carry Falls and Stark Falls Reservoirs, 2.0 mi (3.2 km) southeast of Stark, and 8.8 mi (14.2 km) southeast of South Colton. DRAINAGE AREA, 873 mi^2 (2,261 km^2). PERIOD OF RECORD, October 1954 to current year. GAGE, nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929.

Dam completed January 1953 and controlled storage for which records are available began in October 1954. Usable capacity above elevation 1,332.0 ft (405.99 m) is 5,114.9 mil ft^3 (145 hm^3). Crest at spillway is at elevation 1,386.0 ft (422.45 m). Length of spillway is 830 ft (253 m). Area of water surface at crest elevation is 5.16 mi^2 or 13.4 km^2 (3,300 acres or 1,300 hm^2). The pond has a length of 6 mi (10 km) and a perimeter of 25 mi (40 km). Below crest elevation, capacity controlled by a taintor gate, 27 ft x 15 ft (8m x 5m), and 2 sluice gates, 10 ft x 10 ft (3m x 3m). Records furnished by Niagara Mohawk Power Corp.

EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 5,146 mil ft^3 (146 hm^3) June 1, 5, 6, 1955, elevation, 1,386.1 ft (422.48 m); minimum observed, 8.64 mil ft^3 (0.245 hm^3) Mar. 27-30, 1963, Apr. 4-11, 1964, elevation, 1,331.0 ft (405.69 m).

EXTREMES FOR CURRENT YEAR: Maximum contents observed, 5,132 mil ft^3 (145 hm^3) Oct. 20, elevation, 1,386.0 ft (422.45 m); minimum observed, 411 mil ft^3 (11.6 hm^3) Mar. 27, elevation, 1,340.8 ft (408.68 m).

04273900 LAKE PLACID AT LAKE PLACID, NY (see station for daily mean elevations).

04278000 LAKE GEORGE AT ROGERS ROCK, NY (see station for daily mean gage heights).

04294500 LAKE CHAMPLAIN AT BURLINGTON, VT (see station for daily mean gage heights).

04295000 RICHELIEU RIVER (LAKE CHAMPLAIN) AT ROUSES POINT, NY (see station for daily mean elevations).

MONTHEND GAGE HEIGHT, ELEVATION, AND CONTENTS, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

Date	Gage height (feet)	Contents (million ft^3)	Change in contents (equivalent in ft^3/s)	Elevation (feet)	Contents (million ft^3)	Change in contents (equivalent in ft^3/s)
	04260990 Cranberry Lake			04266700 Carry Falls Reservoir		
Sept. 30	15.6	2,128		1,379.2	4,199.0	
Oct. 31	14.5	1,840	-108	1,384.5	4,924.8	+ 271
Nov. 30	13.6	1,606	- 90.3	1,380.9	4,427.1	- 192
Dec. 31	12.0	1,230	-140	1,378.8	4,147.2	- 105
CAL YR 1977			- 9.58			+ 7.40
Jan. 31	10.9	989	- 90	1,377.7	4,004.6	- 53.2
Feb. 28	9.1	615	-155	1,351.5	1,209.6	- 116
Mar. 31	9.3	655	+ 14.9	1,341.2	437.2	- 288
Apr. 30	14.6	1,866	+467	1,379.3	4,212.0	+1,456
May 31	16.5	2,380	+192	1,385.2	5,021.6	+ 302
June 30	16.3	2,324	- 21.6	1,382.3	4,620.7	- 155
July 31	15.2	2,022	-113	1,375.9	3,771.4	- 317
Aug. 31	14.5	1,840	- 67.9	1,366.4	2,650.8	- 418
Sept. 30	13.2	1,508	-128	1,360.6	2,049.4	- 232
WTR YR 1978			- 19.7			- 68.2

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low-flow or floodflow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Records collected at partial-record stations are presented in two tables. The first is a table of discharge measurements at low-flow partial-record stations and the second is a table of annual maximum stage and discharge at crest-stage stations. Discharge measurements made at miscellaneous sites for both low flow and high flow are given in a third table.

Low-flow partial-record stations

Measurements of streamflow in the area covered by this report made at low-flow partial-record stations are given in the following table. These measurements were made during periods of base flow when streamflow is primarily from ground-water storage. These measurements, when correlated with the simultaneous discharge of a nearby stream when continuous records are available, will give a picture of the low-flow potentiality of a stream. The column headed "Period of record" shows the water years in which measurements were made at the same, or practically the same, site.

DISCHARGE MEASUREMENTS MADE AT LOW-FLOW PARTIAL-RECORD STATIONS DURING WATER YEAR 1978

STATION NO.	STATION NAME	LOCATION	DRAINAGE AREA (SQ MI)	MILES ABOVE MOUTH	PERIOD OF RECORD	MEASUREMENTS DATE	MEASUREMENTS DISCHARGE (CFS)
		HUDSON RIVER BASIN					
01348040	TIMMERMAN CREEK AT WEST ST. JOHNSVILLE NY	LAT 42 59 52, LONG 74 42 00, MONTGOMERY COUNTY, HYDROLOGIC UNIT 02020004, AT BRIDGE ON STATE HIGHWAY 5, AT WEST ST. JOHNSVILLE.	--	0.4	1967, 1978	7-19-78 8-22-78 9-27-78	*2.70 1.02 3.72
01348060	ZIMMERMAN CREEK AT ST. JOHNSVILLE, NY	LAT 42 59 54, LONG 74 41 12, MONTGOMERY COUNTY, HYDROLOGIC UNIT 02020004, AT BRIDGE ON STATE HIGHWAY 5, 0.35 MI (0.6 KM) WEST OF BRIDGE STREET, ST. JOHNSVILLE.	--	.3	1967, 1978	7-19-78 8-22-78 9-27-78	*4.36 1.88 3.05
01354463	POENTIC KILL NEAR SCHENECTADY, NY	LAT 42 48 05, LONG 74 00 04, SCHENECTADY COUNTY, HYDROLOGIC UNIT 02020004, AT BRIDGE ON PRINCETOWN ROAD, ABOUT 1.1 MI (1.8 KM) WEST OF SCHENECTADY.	--	2.6	1978	5- 2-78 7-19-78 8-21-78	.76 .03 .22
01372004	SWARTE KILL AT RIFTON, NY	LAT 41 49 56, LONG 74 01 55, ULSTER COUNTY, HYDROLOGIC UNIT 02020008, AT BRIDGE ON HARDENBURG ROAD, 0.6 MI (1.0 KM) SOUTHEAST OF RIFTON.	14.4	1.7	1978	5- 3-78 7-26-78 8-22-78 9-13-78	*1.39 *2.02 *3.17 *1.74
01372068	LATTINTOWN CREEK NEAR MARLBORO, NY	LAT 41 37 09, LONG 73 59 30, ULSTER COUNTY, HYDROLOGIC UNIT 02020008, AT BRIDGE AT INTERSECTION OF LATTINTOWN AND RIDGE ROADS, 1.4 MI (2.2 KM) NORTHWEST OF MARLBORO.	8.32	2.5	1978	5- 3-78 7-26-78 8-22-78 9-13-78	*5.68 *.20 *.24 *.24
**01374645	LAKE CARMEL INLET AT KENT CORNERS, NY	LAT 41 28 19, LONG 73 39 15, PUTNAM COUNTY, HYDROLOGIC UNIT 02030101, ON DOWNSTREAM RIGHT WINGWALL OF TWIN BOX CULVERT ON STATE HIGHWAY 311, 0.4 MI (0.6 KM) NORTHEAST OF KENT CORNERS.	10.3	.3	1975-76, 1978	5- 4-78 7-24-78 8-24-78	*9.23 *3.64 *2.30
		DELAWARE RIVER BASIN					
01432912	JUDSON BROOK NEAR WHITE LAKE, NY	LAT 41 41 31, LONG 74 49 35, SULLIVAN COUNTY, HYDROLOGIC UNIT 02040104, AT BRIDGE ON STATE HIGHWAY 55, 1.1 MI (1.8 KM) DOWNSTREAM FROM BISHOPS POND, 2.2 MI (3.5 KM) UPSTREAM FROM MOUNTAIN LAKE, AND 1.3 MI (2.1 KM) NORTH OF WHITE LAKE.	4.03	.3	1978	7-21-78 8- 3-78 8-24-78	*.59 *1.45 *.16

* BASE FLOW.
** ALSO A CREST-STAGE PARTIAL-RECORD STATION.

DISCHARGE MEASUREMENTS MADE AT LOW-FLOW PARTIAL-RECORD STATIONS DURING WATER YEAR 1978--CONTINUED

STATION NO.	STATION NAME	LOCATION	DRAINAGE AREA (SQ MI)	MILES ABOVE MOUTH	PERIOD OF RECORD	MEASUREMENTS DATE	MEASUREMENTS DISCHARGE (CFS)
		DELAWARE RIVER BASIN--CONTINUED					
01432915	WHITE LAKE BROOK AT WHITE LAKE, NY	LAT 41 40 30, LONG 74 49 11, SULLIVAN COUNTY, HYDROLOGIC UNIT 02040104, AT BRIDGE ON STATE HIGHWAY 17B, 2.4 MI (3.9 KM) DOWNSTREAM FROM BISHOPS POND, 0.9 MI (1.4 KM) UPSTREAM FROM MOUNTAIN LAKE, AND 0.5 MI (0.8 KM) EAST OF WHITE LAKE.	6.81	4.1	1978	7-21-78 8- 3-78 8-24-78	*2.18 *3.10 *.96
01432920	WHITE LAKE BROOK AT SMALLWOOD, NY	LAT 41 39 29, LONG 74 48 39, SULLIVAN COUNTY, HYDROLOGIC UNIT 02040104, AT BRIDGE ON PINE GROVE ROAD, 0.1 MI (0.2 KM) DOWNSTREAM FROM MOUNTAIN LAKE, AND 0.8 MI (1.3 KM) SOUTHEAST OF SMALLWOOD.	8.63	2.6	1978	7-21-78 8- 3-78 8-24-78	*2.49 *2.88 *1.37
		ALLEGHENY RIVER BASIN					
03013777	PENDERGAST CREEK NEAR CHAUTAUQUA, NY	LAT 42 11 19, LONG 79 27 10, CHAUTAUQUA COUNTY, HYDROLOGIC UNIT 05010002, AT BRIDGE ON STATE HIGHWAY 17J, AT STATE FISH HATCHERY, 1.1 MI (1.8 KM) SOUTHEAST OF VILLAGE LINE OF CHAUTAUQUA.	21.2	.7	1952, 1967-68, 1978	7-13-78	*1.50
03013820	BEMUS CREEK AT BEMUS POINT, NY	LAT 42 09 14, LONG 79 22 57, CHAUTAUQUA COUNTY, HYDROLOGIC UNIT 05010002, AT BRIDGE ON COUNTY ROAD, AT BEMUS POINT.	12.2	.2	1952, 1967-68, 1978	7-13-78	*1.12
		STREAMS TRIBUTARY TO LAKE ONTARIO					
04234380	WEST RIVER AT RUSHVILLE, NY	LAT 42 46 16, LONG 77 12 36, ONTARIO COUNTY, HYDROLOGIC UNIT 04140201, AT BRIDGE ON BLODGETT ROAD, 0.9 MI (1.4 KM) NORTHEAST OF RUSHVILLE.	5.48	--	1965, 1977-78	7-24-78 8-23-78	*.02 0
04234396	WEST RIVER AT VALLEY VIEW, NY	LAT 42 44 20, LONG 77 15 26, YATES COUNTY, HYDROLOGIC UNIT 04140201, AT BRIDGE ON TOWN ROAD IN VALLEY VIEW, AND 2.5 MI (4.0 KM) NORTH OF MIDDLESEX.	18.8	--	1973, 1977-78	7-24-78 8-23-78	*.04 0
04234400	WEST RIVER NEAR MIDDLESEX, NY	LAT 42 41 06, LONG 77 17 19, YATES COUNTY, HYDROLOGIC UNIT 04140201, AT BRIDGE ON TOWN ROAD, 0.15 MI (0.2 KM) SOUTHWEST OF MIDDLESEX, AND 5.5 MI (8.8 KM) UPSTREAM FROM NAPLES CREEK.	29.8	--	1955, 1964-66, 1970-73, 1977-78	7-24-78 8-23-78	*.14 .02
04235724	COLD SPRING BROOK AT WEEDSPORT, NY	LAT 43 02 37, LONG 76 34 42, CAYUGA COUNTY, HYDROLOGIC UNIT 04140201, AT BRIDGE ON STATE HIGHWAY 31, 0.8 MI (1.3 KM) WEST OF WEEDSPORT.	--	2.6	1977-78	7-20-77 9- 1-77 7-20-78 9- 6-78	*6.02 *5.04 *5.21 *5.92
04235727	PUTNAM BROOK AT WEEDSPORT, NY	LAT 43 03 21, LONG 76 33 12, CAYUGA COUNTY, HYDROLOGIC UNIT 04140201, AT BRIDGE ON STATE HIGHWAY 31, 0.8 MI (1.3 KM) NORTHEAST OF WEEDSPORT.	--	1.1	1977-78	7-20-77 9- 1-77 7-20-78 9- 6-78	*1.88 *1.90 *1.50 *1.25
04240253	GEDDES BROOK AT FAIRMOUNT, NY	LAT 43 03 26, LONG 76 14 03, ONONDAGA COUNTY, HYDROLOGIC UNIT 04140201, AT DOWNSTREAM SIDE OF BRIDGE ON HORAN ROAD AT FAIRMOUNT, AND 0.2 MI (0.3 KM) DOWNSTREAM FROM TRACKS OF PENN CENTRAL TRANSPORTATION COMPANY.	--	1.4	1978	7-25-78 9- 6-78	*4.18 *3.42

* BASE FLOW.

DISCHARGE MEASUREMENTS MADE AT LOW-FLOW PARTIAL-RECORD STATIONS DURING WATER YEAR 1978--CONTINUED

STREAMS TRIBUTARY TO LAKE ONTARIO--CONTINUED

STATION NO.	STATION NAME	LOCATION	DRAINAGE AREA (SQ MI)	MILES ABOVE MOUTH	PERIOD OF RECORD	MEASUREMENTS DATE	MEASUREMENTS DISCHARGE (CFS)
04245885	LITTLE BAY CREEK NEAR CENTRAL SQUARE, NY	LAT 43 17 07, LONG 76 08 12, OSWEGO COUNTY, HYDROLOGIC UNIT 04140202, AT BRIDGE ON STATE HIGHWAY 49, 0.5MI (0.8KM) EAST OF CENTRAL SQUARE	--	2.8	1978	7- 3-78 7-21-78 7-24-78	*0.98 2.71 0
04249055	NORTH BRANCH LITTLE SALMON RIVER AT PARISH, NY	LAT 43 25 03, LONG 76 08 42, OSWEGO COUNTY, HYDROLOGIC UNIT 04140102, AT BRIDGE ON STATE HIGHWAY 69, 0.5 MI (0.8 KM) NORTHWEST OF PARISH.	--	--	1968, 1977-78	7- 3-78 8-15-78	*5.5 *3.1
04249060	LITTLE SALMON RIVER AT TEXAS, NY	LAT 43 30 41, LONG 76 15 11, OSWEGO COUNTY, HYDROLOGIC UNIT 04140102, AT BRIDGE ON COUNTY ROAD AT TEXAS.	82.9	1.9	1961-64, 1968, 1971, 1973, 1977-78	8-31-77 7- 3-78 8-15-78	87.9 *32.2 *14.3

* BASE FLOW.

Crest-stage partial-record stations

The following table contains annual maximum discharges for crest-stage stations. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain, but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for each water year is given. Information on some lower floods may have been obtained, but is not published herein. The years given in the period of record represent water years for which the annual maximum has been determined.

Annual maximum discharge at crest-stage partial-record stations during water year 1978

					Annual maximum		
Station No.	Station name	Location	Drainage area (mi²)	Period of record	Date	Gage height (feet)	Discharge (ft³/s)
		Housatonic River basin					
01199477	Stony Brook near Dover Plains, NY	Lat 41°42'38", long 73°37'18", Dutchess County, at culvert on town road, 100 ft (30 m) upstream from Mill River, and 2.9 mi (4.7 km) southwest of Dover Plains.	1.93	1976-78	1-26-78	2.29	153
		Hudson River basin					
01319800	West Branch Sacandaga River at Arietta, NY	Lat 43°15'03", long 74°31'06", Hamilton County, at bridge on State Highway 10, 0.4 mi (0.6 km) north of Arietta.	28.9	1963-78	10-31-78 3-14-78	11.01 11.02	- -
01319950	Sand Lake Outlet near Piseco, NY	Lat 43°22'15", long 74°32'47", Hamilton County, at bridge on State Highway 10, 0.9 mi (1.4 km) upstream from mouth, and 5.5 mi (8.8 km) south of Piseco.	7.16	1962-66, 1968-78	3-14-78	1.48	135
01323000	Kennyetto Creek near Broadalbin, NY	Lat 43°03'57", long 74°09'48", Fulton County, at County bridge on farm road, 2.0 mi (3.2 km) upstream from Broadalbin.	28.3	1940-46‡, 1960-65, 1969-78	3-27-78	4.52	-
01328758	Pecks Creek at Fort Miller, NY	Lat 43°09'10", long 73°35'24", Saratoga County, at culvert on River Road, 0.5 mi (0.8 km) upstream from mouth, and 0.9 mi (1.4 km) southwest of Fort Miller.	2.43	1976-78	3-27-78	16.83	160
01329900	Glowegee Creek tributary at Mosherville, NY	Lat 43°03'24", long 74°00'58", Saratoga County, at culvert on Parkis Mill Road, and 0.4 mi (0.6 km) south of Mosherville.	1.42	1968-78	3-24-68 4-19-69 6-18-70 8-28-71 3-17-72 1- 9-73 R1-28-74 6- 8-78	12.16 11.63 12.65 12.03 12.17 12.54 R12.13 12.00	71 39 105 63 72 100 R70 52
01330880	Saratoga Lake tributary near Bemis Heights, NY	Lat 42°59'43", long 73°43'06", Saratoga County, at culvert on State Highway 423, 1.4 mi (2.3 km) upstream from mouth, and 4.6 mi (7.4 km) northwest of Bemis Heights.	1.67	1976, 1978	5-18-78	11.66	68
01333367	Little Hoosic River at Cherryplain, NY	Lat 42°37'57", long 73°21'23", Rensselaer County, at bridge on town road, just above Kronk Brook, in Cherryplain, 4.2 mi (6.8 km) south of Berlin.	2.22	1976-78	3-27-78	6.49	140
01334550	Case Brook near Eagle Bridge, NY	Lat 42°55'50", long 73°23'15", Rensselaer County, at bridge on town road, 1.2 mi (1.9 km) upstream from mouth, and 1.4 mi (2.3 km) southeast of Eagle Bridge.	2.89	1976-78	3-14-77 3-27-78	7.67 8.51	- 220
01342730	Steele Creek at Ilion, NY	Lat 43°00'04", long 75°26'10", Herkimer County, at bridge on Whitney Street in Ilion, and 1.6 mi (2.6 km) upstream from mouth.	26.1	1978	10-17-77	3.98	-
01346820	Mohawk River tributary at Indian Castle, NY	Lat 43°00'34", long 74°47'47", Herkimer County, at culvert on State Highway 5S, 0.35 mi (0.6 km) west of Indian Castle, and 0.4 mi (0.7 km) upstream from mouth.	1.37	1974-78	4- 1-78	1.83	83

‡ Operated as a continuous-record gaging station.
R Revised.

Annual maximum discharge at crest-stage partial-record stations during water year 1978--Continued

Station No.	Station name	Location	Drainage area (mi²)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (ft³/s)
		Hudson River basin--Continued					
01347460	Spruce Lake tributary near Salisbury Center, NY	Lat 43°10'51", long 74°48'44", Herkimer County, at culvert on town road (Jerseyfield Road), 1.3 mi (2.1 km) upstream from mouth, and 2.9 mi (4.7 km) north of Salisbury Center.	.53	1978	10-17-77	3.94	72
01348420	North Creek near Ephratah, NY	Lat 43°00'28", long 74°33'54", Fulton County, at culvert on town road, 0.4 mi (0.7 km) upstream from mouth, and 1.2 mi (1.9 km) northwest of Ephratah.	6.68	1975-78	10-17-77	3.95	152
01350900	Beaverdam Creek near Knox, NY	Lat 42°38'57", long 74°07'56", Albany County, 250 ft (76 m) downstream from bridge, 1.2 mi (1.9 km) south of Knox, and 1.7 mi (2.7 km) upstream from mouth.	6.91	1978	4- 1-78	6.50	-
01351610	Schoharie Creek tributary No. 2 at Eaton Corners, NY	Lat 42°49'11", long 74°14'49", Schenectady County, at culvert on Peck Road, 1.0 mi (1.6 km) north of Eaton Corners, and 1.2 mi (1.9 km) upstream from mouth.	1.22	1976-78	2-22-76 3-30-77 11- 8-77	R15.94 R13.04 15.43	- - -
01354200	Sandsea Kill at Pattersonville, NY	Lat 42°53'20", long 74°04'42", Schenectady County, at bridge on State Highway 5S, in village of Pattersonville.	9.56	1961, 1963-67, 1971-74, 1976-78	10-17-77	3.48	484
01354300	Plotter Kill at Rynex Corners, NY	Lat 42°49'16", long 74°04'20", Schenectady County, at bridge on State Highway 159, in hamlet of Rynex Corners.	3.70	1958, 1960-68, 1970-74, 1976-78	10-17-77	5.45	442
01355405	Indian Kill near Glenville Center, NY	Lat 42°53'40", long 73°57'27", Schenectady County, 1.1 mi (1.7 km) east of Glenville Center, and 1.3 mi (2.1 km) west of East Glenville.	2.39	1974-78	10-17-77	16.23	76
01361200	Claverack Creek near Claverack, NY	Lat 42°12'54", long 73°43'46", Columbia County, on right bank, 70 ft (21 m) upstream from bridge on State Highway 9H, 0.5 mi (0.9 km) south of Claverack.	60.6	1960-68‡, 1969-73, 1975-78	6-30-73 12-21-73 9-26-75 1-28-76 3-14-77 12- 9-77 3-27-78	12.38 11.70 R9.94 9.98 8.58 b8.03 7.97	R5,590 4,480 R3,610 R3,640 R2,670 - 2,300
01361453	Catskill Creek tributary at Franklinton, NY	Lat 42°31'35", long 74°18'33", Schoharie County, at culvert on town road, 0.15 mi (0.3 km) upstream from mouth, and 0.5 mi (0.8 km) northwest of Franklinton.	3.64	1968-72, 1974-78	3-17-68 4-23-69 11- 8-69 4- 4-71 6-22-72 7- 3-74 4- 3-75 R10-17-75 3-14-77 11- 8-77	5.33 3.22 4.98 3.04 6.15 1.28 4.76 R6.81 R5.34 5.69	180 81 162 75 220 630 153 260 R183 200
01361900	Shingle Kill at Cairo, NY	Lat 42°18'22", long 74°00'15", Greene County, at bridge on town road at Cairo, southeast of State Highway 32, about 400 ft (122 m) south of State Highway 23, and 0.8 mi (1.3 km) upstream from mouth.	13.9	1953, 1966, 1967-74, 1976-78	4- 1-67 5-29-68 9-23-69 12-11-69 5-13-71 6-22-72 6-30-73 7- 3-74 8-10-76 9-20-77 12- 9-77	5.91 6.68 5.62 5.56 5.62 7.46 R4.94 4.92 5.33 4.57 9.70	R825 R1,110 R732 R714 R732 R1,470 R542 R537 R646 R454 2,910

‡ Operated as a continuous-record gaging station.
b Ice jam.
R Revised.

Annual maximum discharge at crest-stage partial-record stations during water year 1978--Continued

					Annual maximum		
Station No.	Station name	Location	Drainage area (mi²)	Period of record	Date	Gage height (feet)	Discharge (ft³/s)
		Hudson River basin--Continued					
01362100	Roeliff Jansen Kill near Hillsdale, NY	Lat 42°09'13", long 73°31'14", Columbia County, at bridge on county highway off State Highway 22, 1.8 mi (2.9 km) south of Hillsdale.	27.5	1958-60‡, 1963-64, 1968-78	1-26-78	4.82	855
01362197	Bushnellsville Creek at Shandaken, NY	Lat 42°07'25", long 74°24'04", Ulster County, along State Highway 42, 0.4 mi (0.6 km) upstream from Esopus Creek, and 0.6 mi (0.97 km) northwest of Shandaken.	11.4	1951, 1956, 1972, 1976-78	11- 8-77	9.48	734
01363388	Dry Brook at West Shokan, NY	Lat 41°58'22", long 74°17'50", Ulster County, at bridge on town road, 0.6 mi (1.0 km) northwest of West Shokan, and 1.2 mi (1.9 km) upstream from mouth.	1.67	1978	11-18-77	4.25	220
01368713	Wawayanda Creek at Durland, NY	Lat 41°16'44", long 74°18'20", Orange County, 75 ft (22.9 m) upstream from bridge on State School Road, at Durland, 0.1 mi (0.2 km) downstream from Wickham Lake, and 2.5 mi (4.0 km) northeast of Warwick.	5.15	1971-78	3-27-78	16.10	-
01368724	Long House Creek at Bellvale, NY	Lat 41°15'10", long 74°18'30", Orange County, at bridge on Iron Forge Road, at Bellvale, and 1.9 mi (3.1 km) upstream from mouth.	11.8	1971-78	3-27-78	16.18	-
01368810	Wawayanda Creek at New Milford, NY	Lat 41°14'18", long 74°25'03", Orange County, at bridge on Ryerson Road, at New Milford, 0.2 mi (0.3 km) upstream from Double Kill.	45.0	1971-78	3-27-78	15.09	-
01372200	Wappinger Creek near Clinton Corners, NY	Lat 41°48'55", long 73°45'50", Dutchess County, on right downstream wingwall of highway bridge 850 ft (259 m) downstream from abandoned bridge abutment of Philadelphia, Reading, and New England Railroad, 1,900 ft (579 m) downstream from East Branch Wappinger Creek, and 1 mi (1.6 km) south of Clinton Corners.	92.4	1956-76‡, 1977-78	1-26-78	9.80	1,620
01372948	Clove Creek near North Highland, NY	Lat 41°28'50", long 73°54'35", Putnam County, at bridge on Mill Road, 1.6 mi (2.6 km) northeast of North Highland.	12.1	1975-78	11- 8-77	3.83	-
01373690	Woodbury Creek near Highland Mills, NY	Lat 41°22'00", long 74°06'17", Orange County, on left bank, 40 ft (12 m) downstream from culvert type bridge on road to Atlantic Coast Aggregate Corp. plant, 1,200 ft (365 m) downstream from bridge on N.Y. Highway 32, and 1.9 mi (3.1 km) north of Highland Mills.	11.2	1966-68‡, 1971-72, 1977-78	11- 8-77	5.45	-
01374130	Canopus Creek at Oscawana Corners, NY	Lat 41°22'43", long 73°52'23", Putnam County, at bridge on Hortun Hollow Road, 0.4 mi (0.6 km) downstream from West Branch, and 0.8 mi (1.3 km) west of Oscawana Corners.	8.30	1975-78	11- 8-77	4.07	280
01374250	Peekskill Hollow Creek at Tompkins Corners, NY	Lat 41°23'18", long 73°48'47", Putnam County, at bridge on Bryant Pond Road, 0.9 mi (1.4 km) southwest of Tompkins Corners, and 1.1 mi (1.8 km) downstream from Wiccopee Brook.	14.96	1975-78	11- 8-77	3.49	-

‡ Operated as a continuous-record gaging station.

Annual maximum discharge at crest-stage partial-record stations during water year 1978--Continued

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (ft^3/s)
		Hudson River basin--Continued					
01374440	Cedar Pond Brook at Stony Point, NY	Lat 41°13'36", long 73°59'04", Rockland County, at bridge on Lowland Hill Road, 1,200 ft downstream from U.S. Highway 9-W, at Stony Point, 0.9 mi (1.4 km) downstream from water-supply reservoir, 1.5 mi (2.4 km) upstream from mouth.	17.4	1976	1-27-76	3.49	477
01374456	South Branch Minisceongo Creek tributary near Mount Ivy, NY	Lat 41°10'48", long 74°03'22", Rockland County, 50 ft (15 m) downstream from twin culvert on Camp Hill Road, 0.2 mi (0.3 km) south of U.S. Highway 202, and 1.2 mi (1.9 km) southwest of Mount Ivy.	.90	1977-78	2-25-77 11- 8-77	4.30 4.87	49 66
01374458	South Branch Minisceongo Creek at Mount Ivy, NY	Lat 41°11'32", long 74°02'32", Rockland County, 25 ft (8 m) downstream from bridge on Quaker Road, 0.5 mi (0.8 km) north of U.S. Highway 202, and 0.5 mi (0.8 km) northwest of Mount Ivy.	5.23	1977-78	9-26-77 11- 9-77	2.68 3.29	147 296
01374480	Minisceongo Creek at Thiells, NY	Lat 41°12'34", long 74°01'16", Rockland County, on left bank at old bridge, at Thiells, 0.8 mi (1.3 km) upstream from Garnerville Reservoir, and 1.2 mi (1.9 km) downstream from South Branch Minisceongo Creek.	15.0	1977-78	9-26-77 11- 8-77	3.36 4.69	769 1,560
01374494	Haviland Hollow Brook near Putnam Lake, NY	Lat 41°29'03", long 73°34'16", Putnam County, at bridge on Haviland Hollow-Putnam Lake Road, 0.6 mi (1.0 km) upstream from mouth, and 2 mi (3.2 km) northwest of Putnam Lake.	12.19	1977-78	1- 9-78	6.36	-
013744949	East Branch Croton River near Deforest, NY	Lat 41°25'16", long 73°33'00", Putnam County, at culvert on County Road 84, 1.7 mi (2.7 km) south of Deforest Corners, and 0.6 mi (1.0 km) west of New York and Connecticut line.	.61	1977-78	1- 9-78	7.45	-
†01374645	Lake Carmel Inlet at Kent Corners, NY	Lat 41°28'19", long 73°39'15", Putnam County, at culvert on State Highway 311, 0.3 mi (0.5 km) upstream from mouth, and 0.4 mi (0.6 km) northeast of Kent Corners.	10.3	1975-78	R9-27-75 R8-10-76 9-14-77 11- 8-77	R2.82 R2.38 2.05 3.16	- - - -
01376410	Saw Mill River at at Eastview, NY	Lat 41°04'48", long 73°49'40", Westchester County, at bridge on Old Saw Mill River Road in Eastview, and 200 ft (61 m) upstream from Tarrytown Reservoir Outlet.	12.49	1975, 1977-78	11- 8-77	9.63	-
		Hackensack River basin					
01376570	New City Brook near New City, NY	Lat 41°10'09", long 73°58'46", Rockland County, at bridge on road north of Christie Airport, 0.5 mi (0.8 km) east of Zukor Road, 0.8 mi (1.3 km) upstream from mouth, and 1.1 mi (1.8 km) north of New City.	5.51	1972-78	R6-30-76 3-14-78	7.45 6.26	1,450 690

† Also a low-flow partial-record station.

R Revised.

Annual maximum discharge at crest-stage partial-record stations during water year 1978--Continued

					Annual maximum		
Station No.	Station name	Location	Drainage area (mi²)	Period of record	Date	Gage height (feet)	Discharge (ft³/s)
		Hackensack River basin--Continued					
01376600	Hackensack River at Brookside Park, NY	Lat 41°10'18", long 73°58'24", Rockland County, at Brookside Park, 900 ft (270 m) upstream from State Highway 304, 1,300 ft (400 m) upstream from DeForest Lake, 0.8 mi (1.3 km) downstream from unnamed tributary, and 1.2 mi (1.9 km) from Lake Lucille.	13.2	1959-63‡, 1967-78	11- 8-77	7.92	-
01376690	East Branch Hackensack River near Congers, NY	Lat 41°07'32", long 73°57'24", Rockland County, about 0.1 mi (0.2 km) downstream from small pond, half a mile (0.8 km) upstream from DeForest Lake, and 2 mi (3 km) south of Congers.	6.86	1960, 1968-69, 1971-78	11- 8-78	10.61	820
01376842	Nauraushaun Brook at Nanuet, NY	Lat 41°05'49", long 74°00'40", Rockland County, on downstream left wingwall of culvert on old State Highway 59A, 50 ft (15 m) upstream from culvert on State Highway 59 in Nanuet.	2.33	1976-78	7- 1-76 4- 1-77	6.12 4.84	384 620
01376855	Nauraushaun Brook at Pearl River, NY	Lat 41°03'32", long 73°59'35", Rockland County, on left bank, south of Blauvelt Road, 100 ft (30 m) upstream from bridge of Sickeltown Road, 0.6 mi (1.0 km) upstream from mouth, and 0.8 mi (1.3 km) east of Pearl River.	6.04	1976-78	7- 1-76 3-22-77 11- 8-77	5.15 3.68 4.68	1,550 444 1,040
01377180	Pascack Brook at Spring Valley, NY	Lat 41°06'45", long 74°02'00", Rockland County, on road to Orange and Rockland Utilities substation, and 0.7 mi (1.1 km) east of Spring Valley.	2.13	1972-78	11- 7-77	3.82	-
01377196	Pascack Brook tributary at Erie Railroad at Spring Valley, NY	Lat 41°06'41", long 74°02'35", Rockland County, at Spring Valley, 20 ft (6 m) downstream from Erie Railroad Bridge, 300 ft (91 m) downstream from reservoir, and 0.9 mi (1.4 km) upstream from Pascack Brook.	3.88	1977-78	3-22-77 11- 8-77	3.17 4.81	317 493
01377200	Pascack Brook tributary at Spring Valley, NY	Lat 41°06'15", long 74°01'57", Rockland County, 250 ft (76 m) upstream from mouth, on right downstream wingwall of bridge on Pascack Road at Spring Valley.	4.58	1960-62‡, 1963-74, 1976-78	11- 8-77	6.60	-
01377260	Pascack Brook near Pearl River, NY	Lat 41°04'30", long 74°02'47", Rockland County, on right bank, in Town of Ramapo Park, 250 ft (76 m) east of Pascack Road, 0.7 mi (1.1 km) upstream from Crooked Hill Road, and 1.1 mi (1.8 km) northeast of Pearl River.	8.42	1977-78	6-30-76 2-25-77 11- 8-77	7.80 6.95 7.31	- 1,150 1,440
01387250	Ramapo River at Sloatsburg, NY	Lat 41°10'08", long 74°11'27", Rockland County, on left bank, 300 ft (91 m) upstream from Washington Avenue bridge, 600 ft (183 m) downstream from unnamed tributary at Sloatsburg, 0.6 mi (1.0 km) upstream from Stony Brook.		1956 1960-63 1976-78	1-28-76 3-23-77 11- 8-77	8.68 9.85 11.03	1,510 2,370 2,960
01387350	Nakoma Brook at Sloatsburg, NY	Lat 41°09'14", long 74°11'38", Rockland County, 50 ft (15 m) downstream from tributary, 100 ft (30 m) upstream from State Highway 17, 0.5 mi (0.8 km) upstream from mouth, 1.1 mi (1.8 km) downstream from Cranberry Pond Outlet, at Sloatsburg.	5.35	1960-78	11- 8-77	8.56	-
01387410	Torne Brook at Ramapo, NY	Lat 41°08'34", long 74°09'44", Rockland County, 0.2 mi (0.3 km) upstream from mouth, and 0.5 mi (0.8 km) east of Ramapo.	2.62	1960, 1962-78	11- 8-77	12.08	1,520

‡ Operated as a continuous-record gaging station.

Annual maximum discharge at crest-stage partial-record stations during water year 1978--Continued

Station No.	Station name	Location	Drainage area (mi²)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (ft³/s)
		Delaware River basin					
01417185	Campbell Brook tributary near Downsville, NY	Lat 42°02'41", long 74°58'37", Delaware County, at culvert on Campbell Brook Road, 200 ft (61 m) upstream from mouth, 2.0 mi (3.2 km) southwest of Downsville Dam, and 2.7 mi (4.3 km) southeast of Downsville.	.41	1975-78	1- 9-78	2.50	31
01436050	Neversink River tributary to tributary No. 3 near Loch Sheldrake, NY	Lat 41°48'05", long 74°37'53", Sullivan County, at culvert on town road, 0.2 mi (0.3 km) upstream from mouth, and 2.5 mi (4.0 km) northeast of Loch Sheldrake.	1.36	1975-78	11- 8-77	2.57	70
01437345	Basher Kill tributary near Westbrookville, NY	Lat 41°30'34", long 74°32'36", Sullivan County, at culvert on town road, 0.2 mi (0.3 km) upstream from mouth, and 1.0 mi (1.6 km) northeast of Westbrookville.	1.51	1975-78	11- 9-78 2- 7-78	4.78 b5.30	117 -
		Susquehanna River basin					
01496370	Mink Creek at Richfield Springs, NY	Lat 42°50'55", long 75°00'10", Otsego County, at bridge on State Highway 28, 0.4 mi (0.6 m) southwest of Richfield Springs, and 1 mi (1.6 km) upstream from mouth.	10.4	1969-78	10-17-77	5.13	-
01497795	Little Elk Creek near Westford, NY	Lat 42°38'01", long 74°47'45", Otsego County, at culvert on Greenbush Road, 1.2 mi (1.9 km) south of Westford, and 2.2 mi (3.5 km) from mouth.		1978	10-17-78	18.54	202
01501140	Wharton Creek tributary near Edmeston, NY	Lat 42°42'35", long 75°13'19", Otsego County, at culvert on town road, 1.1 mi (1.8 km) upstream from mouth, and 1.4 mi (2.3 km) northeast of Edmeston.	2.02	1976-78	3-31-78	4.39	144
01502714	Oquaga Creek near Belden, NY	Lat 42°10'12", long 75°40'45", Broome County, at culvert on Kane Road, 2.3 mi (3.7 km) south of Belden, 2.8 mi (4.5 km) west of Harpursville, and 4.5 mi (7.2 km) upstream from mouth.	3.37	1977-78	1- 9-78	4.55	298
01503960	Electric Light Stream near Morrisville, NY	Lat 42°52'51", long 75°38'37", Madison County, at bridge on Eaton-Morrisville Road, in Eagleville, 0.4 mi (0.6 km) upstream from mouth, and 1.3 mi (2.1 km) south of Morrisville.	7.21	1976-78	10-17-77	9.81	205
01503980	Chenango River at Eaton, NY	Lat 42°51'02", long 75°36'21", Madison County, at bridge on London Road at Eaton, 0.1 mi (0.2 km) upstream from Eaton Brook, and 0.1 mi (0.2 km) downstream from State Highway 26.	24.3	1964-65, 1967-78	2- 9-65 6-22-72 10-17-77	6.56 R7.92 7.39	476 R1,830 960
01505018	Cold Brook at North Norwich, NY	Lat 42°36'26", long 75°31'58", Chenango County, at culvert on town road, 0.8 mi (1.3 km) southwest of North Norwich, and 1.5 mi (2.4 km) upstream from mouth.	4.77	1975-78	9-26-75 2-22-76 3-28-78	4.23 3.00 4.76	193 129 216
01507000	Chenango River at Greene, NY	Lat 42°19'28", long 75°46'18", Chenango County, on left bank 1,700 ft (520 m) downstream from bridge on State Highway 206 at Greene, and 0.6 mi (1.0 km) downstream from Birdsall Creek.	593	1937-70‡, 1971-78	1-27-78	14.64	12,300

‡ Operated as a continuous-record gaging station.
b Ice jam.
R Revised.

Annual maximum discharge at crest-stage partial-record stations during water year 1978--Continued

Station No.	Station name	Location	Drainage area (mi²)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (ft³/s)
		Susquehanna River basin--Continued					
01508946	Otter Creek tributary at State Highway 222 near Cortland, NY	Lat 42°35'22", long 76°14'01", Cortland County, at culvert on State Highway 222, 1.0 mi (1.6 km) upstream from mouth, and 1.8 mi (2.9 km) west of Cortland.	2.85	1976-78	3-22-78	11.09	60
01510610	Merrill Creek tributary near Texas Valley, NY	Lat 42°28'03", long 75°59'19", Cortland County, at bridge on town road, 0.3 mi (0.5 km) upstream from mouth, and 1.4 mi (2.3 km) southwest of Texas Valley.	5.32	1976-78	5-22-76 1- 9-78	3.32 1.84	660 368
01511500	Tioughnioga River at Itaska, NY	Lat 42°17'55", long 75°54'30", Broome County, on right bank at Itaska, 3.8 mi (6.1 km) downstream from Otselic River and village of Whitney Point, and 6 mi (10 km) upstream from mouth.	730	1929-67‡, 1968-78	4- 1-78	7.55	9,390
01512515	Page Brook Tributary near Page Brook, NY	Lat 42°17'16", long 75°43'24", Wiley Road, 0.1 mi (0.2 mi) upstream from mouth, and 2.9 mi (4.7 km) northeast of Page Brook.	2.07	1977-78	1-26-78	3.56	253
01513500	Susquehanna River at Vestal, NY	Lat 42°05'27", long 76°03'23", Broome County, on left bank 400 ft (120 m) downstream from highway bridge at Vestal, and 800 ft (240 m) upstream from Choconut Creek.	3,941	1938-67‡, 1968-72, 1974-78	4- 5-78	21.13	54,200
01513712	Nanticoke Creek tributary at Nanticoke, NY	Lat 42°16'40", long 76°02'51", Broome County, at culvert on Rabbit Road, 0.4 mi (0.6 km) northeast of Nanticoke, and 0.6 mi (1.0 km) upstream from mouth.	1.70	1976-78	10- 9-76 3-27-78	5.86 4.41	320 229
01521596	Big Creek near Howard, NY	Lat 42°22'01", long 77°34'33", Steuben County, at culvert on town road, 0.1 mi (0.2 km) south of State Highway 70, 1.3 mi (2.1 km) north of Butch Corner, 3.4 mi (5.5 km) west of Howard, and 6.2 mi (10.0 km) upstream from mouth.	6.36	1978	1-26-78	15.69	470
01525500	Canisteo River at West Cameron, NY	Lat 42°13'20", long 77°25'05", Steuben County, on right bank 250 ft (76 m) downstream from bridge on County Highway 119, 0.3 mi (0.5 km) southeast of West Cameron, and 1.7 mi (2.7 km) north of Cameron.	340	1930-31‡, 1937-70‡, 1971-72, 1974-78	5-14-78	12.33	7,230
		Allegheny River basin					
03010734	Ischua Creek near Machias, NY	Lat 42°24'28", long 78°33'33", Cattaraugus County, at culvert on Very Road, 0.2 mi (.32 km) upstream from mouth, 0.7 mi (1.1 km) north of State Highway 242, and 1.5 mi (2.4 km) west of Machias.	5.12	1978	10- 9-77	10.02	580
03010743	Johnson Creek near Franklinville, NY	Lat 42°22'37", long 78°26'38", Cattaraugus County, at culvert on Pigeon Hill Road, 0.2 mi (0.3 km) north of State Highway 98, 1.3 mi (2.1 km) from mouth and 2.1 mi (3.4 km) north of Franklinville boundary.	5.25	1977-78	4- 5-78	14.78	260

‡ Operated as a continuous-record gaging station.

Annual maximum discharge at crest-stage partial-record stations during water year 1978--Continued

Station No.	Station name	Location	Drainage area (mi²)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (ft³/s)
		Allegheny River basin--Continued					
03010800	Olean Creek near Olean, NY	Lat 42°07'12", long 78°25'12", Cattaraugus County, on right bank at upstream side of highway bridge, 1,000 ft (300 m) west of State Highway 16, 1.4 mi (2.3 km) northeast of Olean, and 4.6 mi (7.4 km) upstream from mouth.	198	1959-68‡, 1970-78	4- 5-78	11.47	4,750
03010997	Great Valley Creek tributary near Great Valley, NY	Lat 42°12'02", long 78°41'22", Cattaraugus County, at culvert on Hungry Hollow Road, 1.1 mi (1.8 km) upstream from mouth, 1.1 mi (1.8 km) northwest of intersection of U.S. Highway 219 and Hungry Hollow Road, and 2.9 mi (4.7 km) southwest of Great Valley.	3.91	1977-78	7- 8-77 4- 5-78	15.30 15.44	370 380
03011000	Great Valley Creek near Salamanca, NY	Lat 42°10'42", long 78°41'40", Cattaraugus County, on left bank 0.3 mi (0.5 km) upstream from highway bridge, 1 mi (1.6 km) downstream from Hungry Hollow, 1.5 mi (2.4 km) northeast of Salamanca, and 2 mi (3.2 km) upstream from mouth.	137	1950-68‡, 1977-78	4- 5-78	15.80	5,800
03012837	West Branch Conewango Creek tributary near Hamlet, NY	Lat 42°21'55", long 79°10'17", Chautauqua County, at culvert on Hamlet Road, 0.1 mi (0.2 km) west of the intersection of State Highway 83 and Hamlet Road, 1.0 mi (1.6 km) upstream from mouth, and 1.9 mi (3.1 km) west of Hamlet.	6.84	1977-78	7- 9-77 4- 5-78	16.87 17.25	380 535
03013800	Ball Creek at Stow, NY	Lat 42°09'13", long 79°24'27", Chautauqua County, at bridge on State Highway 17J at Stow.	9.06	1935-66, 1975, 1977-78	4- 5-78	16.44	761
		Streams tributary to Lake Erie					
04213490	South Branch Cattaraugus Creek near Otto, NY	Lat 42°21'54", long 78°48'06", Cattaraugus County, at highway bridge, 0.2 mi (0.3 km) upstream from Mansfield Creek, and 1.7 mi (2.7 km) northeast of Otto.	25.6	1963-78	3-21-78	5.98	1,390
04214040	Delaware Creek near Angola, NY	Lat 42°37'46", long 79°03'15", Erie County, at bridge on State Highway 5, 1.5 mi (2.4 km) southwest of Angola, and 1.6 mi (2.6 km) upstream from mouth.	8.15	1963-78	3-21-78	4.53	512
04214410	Hunter Creek at Colegrave, NY	Lat 42°44'11", long 78°32'55", Erie County, at bridge on Center Line Road, 0.3 mi (0.5 km) east of Colegrave, and 3.5 mi (5.6 km) upstream from mouth.	14.0	1964-78	4- 5-78	5.78	-
04214980	Little Buffalo Creek near East Lancaster, NY	Lat 42°52'46", long 78°36'27", Erie County, at bridge on Schwartz Road, 1.9 mi (3.1 km) southeast of East Lancaster, and 2.9 mi (4.7 km) upstream from mouth.	23.9	1963-73, 1976-78	3-21-78	5.94	512
		Streams tributary to Niagara River					
04216400	Tonawanda Creek near Johnsonburg, NY	Lat 42°43'05", long 78°19'18", Wyoming County, on State Highway 98 near Johnsonburg, and 0.6 mi (1.0 km) downstream from East Fork.	23.6	1962-78	R1-12-68 4- 5-78	6.57 8.56	598 1,120

‡ Operated as a continuous-record gaging station.
R Revised.

Annual maximum discharge at crest-stage partial-record stations during water year 1978--Continued

Station No.	Station name	Location	Drainage area (mi²)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (ft³/s)
		Streams tributary to Niagara River--Continued					
04217700	Murder Creek at Pembroke, NY	Lat 42°59'37", long 78°26'08", Genesee County, at Lake Road bridge, 0.3 mi (0.5 km) south of Pembroke, and 12.5 mi (20.1 km) west of Batavia.	43.9	1962-72, 1974-78	3-22-78	8.95	1,400
04219645	Fourmile Creek near Youngstown, NY	Lat 43°13'49", long 79°01'01", Niagara County, at culvert on Balmer Road, 200 ft (61 m) east of State Highway 18, 1.5 mi (3.2 km) southeast of Youngstown, and 3.4 mi (5.5 km) above the mouth.	4.88	1969-70, 1971-73, 1976-78	4- 2-70 3-15-71 3- 2-72 6-23-72 12- 6-72 3- 5-76 4-23-77 3-21-78	- a8.40 6.62 6.28 a8.15 9.19 7.85 9.54	300 a180 - 110 a260 300 170 130
		Streams tributary to Lake Ontario					
04219900	Johnson Creek near Lyndonville, NY	Lat 43°20'21", long 78°20'55", Orleans County, at bridge on Woodworth Road, 3.3 mi (5.3 km) downstream from dam at Lyndonville, and 4.4 mi (7.1 km) upstream from mouth.	87.7	1962-66, 1970, 1972-73, 1976-78	4-28-66 4- 2-70 6-24-72 3-17-73 3-22-78	6.64 6.16 5.40 5.61 7.38	1,540 1,320 1,020 1,100 1,860
04219905	Johnson Creek tributary near Lyndonville, NY	Lat 43°20'09", long 78°19'30", Orleans County, at culvert on Alps Road at intersection of Goodwin Road, 0.5 mi (0.8 km) upstream from mouth, and 2.8 mi (4.5 km) east of Lyndonville.	1.95	1977-78	3-22-78	24.79	155
04219922	Oak Orchard Creek at Barrville Road near Elba, NY	Lat 43°05'42", long 78°08'43", Genesee County, at culvert on Barrville Road, 2.3 mi (3.7 km) northeast of Elba, and 6.0 mi (9.6 km) north of Batavia.	6.34	1977-78	3-22-78	9.83	-
04219925	Oak Orchard Creek near Elba, NY	Lat 43°06'46", long 78°07'39", Genesee County, at bridge on Strouts Road, at intersection with Watson Road, and 3.3 mi (5.3 km) northwest of Elba village line.	7.49	1976-78	3-22-78	9.42	-
04220045	Oak Orchard Creek near Shelby, NY	Lat 43°10'25", long 78°23'13", Orleans County, at bridge on Harrison Road, 0.2 mi (0.3 km) east of State Highway 63, and 1.1 mi (1.8 km) south of Shelby.	150	1977-78	3-22-78	8.54	960
04220245	West Creek near Hamlin, NY	Lat 43°17'42", long 71°53'32", Monroe County, at culvert on Hamlin Center Road, 1.5 mi (2.4 km) east of State Highway 18, and 1.6 mi (2.6 km) southeast of Hamlin.	4.56	1978	3-22-78	7.10	-
04221769	Black Creek at Hyder Flats Road at Black Creek, NY	Lat 42°16'03", long 78°13'38", Allegany County, at culvert on Ryder Flats Road, 0.6 mi (1.0 km) south of Black Creek, and 8.5 mi (13.7 km) upstream from mouth.	10.6	1978	3-22-78	7.61	3,500
04222600	Wiscoy Creek at Bliss, NY	Lat 42°34'59", long 78°14'16", Wyoming County, at bridge on county road, 0.1 mi (0.2 km) north of State Highway 39, and 0.6 mi (1.0 km) east of Bliss.	21.8	1962-65, 1967-78	3-22-78	3.04	-
04224700	Sugar Creek near Ossian, NY	Lat 42°30'52", long 77°48'12", Livingston County, on right bank 300 ft (91 m) downstream from bridge on Linzy Road, 1.3 mi (2.1 km) southwest of Ossian, and 5.1 mi (8.2 km) upstream from mouth.	9.83	1975, 1977-78	3-22-78	4.09	307
04224807	Stony Brook tributary at South Dansville, NY	Lat 42°28'16", long 77°40'21", Steuben County, at culvert on Willey Road, 0.6 mi (1.0 km) from mouth, and 0.9 mi (1.4 km) west of South Dansville.	3.29	1977-78	5-24-77 5-21-78	13.39 10.58	520 224

a Approximately.

Annual maximum discharge at crest-stage partial-record stations during water year 1978--Continued

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (ft^3/s)
		Streams tributary to Lake Ontario--Continued					
04224900	Mill Creek at Patchinville, NY	Lat 42°31'13", long 77°35'06", Steuben County, at bridge on Ellinger Road, 0.1 mi (0.2 km) east of State Highway 21, 0.8 mi (1.3 km) south of Patchinville, 3.3 mi (5.3 km) south of Wayland, and 9.1 mi (14.6 km) upstream from mouth.	5.00	1964-78	4- 5-78	2.27	270
04231040	Hotel Creek at Griffin Road near Churchville, NY	Lat 43°03'57", long 77°52'29", Monroe County, at bridge on Griffin Road, 3.0 mi (4.8 km) upstream from mouth, and 3.1 mi (5.0 km) southeast of Churchville.	4.57	1976-78	3- 6-76 9-25-77 3-22-78	12.41 12.19 12.41	- - -
042320527	Mill Creek tributary near Webster, NY	Lat 43°14'45", long 77°26'43", Monroe County, at culvert on Woodboro Farms Road, 400 ft (120 m) east of Holt Road, and 1.0 mi (1.6 km) north of Webster.	1.80	1976-78	2-22-78	12.02	123
042320578	Bear Creek at Ontario, NY	Lat 43°13'30", long 77°17'00", Wayne County, at culvert on New Street in Ontario, 100 ft (30 m) west of Furnace Road.	6.74	1975-78	3-22-78	12.76	148
04232071	Second Creek tributary at Alton, NY	Lat 43°12'36", long 76°59'32", Wayne County, at culvert on Bond Road, 200 ft (60 m) south of U.S. Highway 104, 0.3 mi (0.5 km) from mouth, and 0.6 mi (1.0 km) west of Alton.	1.07	1976-78	3-22-78	11.83	25
04232087	Red Creek tributary No. 16 near Red Creek, NY	Lat 43°13'36", long 76°42'23", Cayuga County, at culvert on town road (Red Creek Road), 1.3 mi (2.1 km) southeast of Red Creek.	2.90	1976-78	12-14-77	7.26	70
04232460	Sugar Creek at Guyanoga, NY	Lat 42°37'23", long 77°09'30", Yates County, at bridge on Sid White Road, 0.4 mi (0.6 km) east of Guyanoga, and 2.3 mi (3.7 km) upstream from mouth.	28.9	1966-78	R9-25-77 4- 2-78	R4.09 3.81	R475 334
04232630	Kendig Creek near MacDougall, NY	Lat 42°50'57", long 76°53'33", Seneca County, at downstream side of bridge on County Highway 120, 3.0 mi (4.8 km) north of MacDougall, 3.5 mi (5.6 km) southwest of Waterloo, and 4.6 mi (7.4 km) upstream from mouth.	13.8	1965-68‡, 1969-73, 1975-78	R9-25-77 3-15-78	R5.14 6.72	- -
04233255	Cayuga Inlet at Ithaca, NY	Lat 42°25'38", long 76°31'19", Tompkins County, on upstream abutment face of flood-control weir, at east end of Burtt Place, south of Ithaca city line, 0.3 mi (0.5 km) east of State Highway 13a, 0.9 mi (1.4 km) downstream from Buttermilk Creek, and 2.4 mi (3.9 km) upstream from mouth.	86.7	1972, 1975-78	10-17-77	10.00	4,130
04233310	Sixmile Creek near Ithaca, NY	Lat 42°24'33", long 76°27'14", Tompkins County, at bridge on Burns Road, 1.8 mi (2.9 km) southeast of Ithaca, and 4.4 mi (7.1 km) upstream from mouth.	42.0	1967-69 1971-73 1976-78	R9-24-77 10-17-77	R6.97 7.46	R2,950 3,390
04233676	Virgil Creek at Dryden, NY	Lat 42°29'18", long 76°18'08", Tompkins County, at bridge on Mill Street at Dryden, and 0.1 mi (0.2 km) upstream from Dryden Lake Outlet.	20.6	1966-70, 1972, 1975-78	3-22-78	4.64	1,290

‡ Operated as a continuous-record gaging station.
R Revised.

Annual maximum discharge at crest-stage partial-record stations during water year 1978--Continued

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (ft^3/s)
		Streams tributary to Lake Ontario--Continued					
04233700	Virgil Creek at Freeville, NY	Lat 42°30'18", long 76°21'01", Tompkins County, on left bank, 10 ft (3 m) upstream from bridge on Johnson Street in Freeville, and 0.8 mi (1.3 km) upstream from Fall Creek.	40.3	1974-75‡, 1976-78	R9-25-77 3-22-78	R17.08 18.07	R1,330 1,640
042340202	Cayuga Lake tributary No. 8 near Jacksonville, NY	Lat 42°32'24", long 76°35'35", Tompkins County, at culvert on State Highway 89 (Taughannock Boulevard), 0.1 mi (0.2 km) upstream from mouth, and 2.4 mi (3.9 km) northeast of Jacksonville.	1.36	1977-78	9-25-77 9-25-78	6.90 <6.73	122 <106
042340588	Yawger Creek tributary near Auburn, NY	Lat 42°54'41", long 76°39'46", Cayuga County, at culvert on Chamberlain Road, 3.5 mi (5.6 km) west of Auburn, and 4.3 mi (6.9 km) upstream from mouth.	1.76	1976-78	4- 1-78	11.42	46
04234200	Mud Creek at East Victor, NY	Lat 42°58'28", long 77°22'57", Ontario County, 25 ft (8 m) downstream from bridge on State Highway 96, 0.3 mi (0.5 km) upstream from Fish Creek, at East Victor.	64.2	1958-68‡, 1972, 1976-78	3-22-78	6.30	1,230
04234363	Erie (Barge) Canal tributary near Newark, NY	Lat 43°02'47", long 77°02'57", Wayne County, at culvert at intersection of Brumm and Sutton Roads, and 1.2 mi (1.9 km) east of Newark.	0.58	1976-78	3-22-78	4.39	18
04235255	Canandaigua Outlet tributary near Alloway, NY	Lat 43°00'21", long 77°00'54", Wayne County, at bridge on Pre-Emption Road, 0.5 mi (0.8 km) south of Wayne-Ontario County line, and 1.8 mi (2.9 km) southwest of Alloway.	2.94	1978	12-14-77	6.20	103
04235276	Black Brook at Tyre, NY	Lat 42°59'30", long 76°48'13", Seneca County, at bridge on County Highway 101, in village of Tyre, and 0.8 mi (1.3 km) upstream from mouth.	19.0	1966-73, 1975-78	12-14-77	5.02	-
04242795	Canada Creek tributary near Lee Center, NY	Lat 43°19'40", long 75°31'52", Oneida County, at culvert on Streum Road at Negro Road, 1.6 mi (2.6 km) upstream from mouth, 1.7 mi (2.7 km) northwest of Lee Center, and 7.6 mi (12.2 km) northwest of Rome.	1.34	1977-78	10- 2-77	2.77	95
04244000	Chittenango Creek near Chittenango, NY	Lat 43°01'25", long 75°51'30", Madison County, on right bank upstream side of county highway bridge, 50 ft (15 m) west of State Highway 13, 1.6 mi (2.6 km) south of Chittenango, 12 mi (19 km) upstream from Butternut Creek, and 23 mi (37 km) upstream from mouth.	66.3	1950-68‡, 1978	R10-17-77	7.41	3,300
04245236	Meadow Brook at Hurlburt Road, Syracuse, NY	Lat 43°02'30", long 76°06'02", Onondaga County, on right bank, 170 ft (52 m) downstream from culvert at intersection of Hurlburt Road and Meadowbrook Drive, and 2.3 mi (3.7 km) upstream from mouth.	2.90	1971-73‡, 1974-78	10-21-76 9-19-78	5.31 4.22	R595 356
04245405	Negro Brook near Bridgeport, NY	Lat 43°07'46", long 75°56'50", Madison County, at culvert on Marsh Mill Road, 0.2 mi (0.3 km) upstream from mouth, and 2.1 mi (3.4 km) southwest of Bridgeport.	1.53	1976-78	R4-24-77 5- 9-78	R4.41 1.72	R69 45

‡ Operated as a continuous-record gaging station.
< Less than.
R Revised.

Annual maximum discharge at crest-stage partial-record stations during water year 1978--Continued

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Annual maximum Date	 Gage height (feet)	 Discharge (ft^3/s)
		Streams tributary to Lake Ontario--Continued					
04245840	Scriba Creek near Constantia, NY	Lat 43°15'35", long 76°00'11", Oswego County, on right bank, 8 ft (2 m) upstream from road to Ingersol Road, and about 0.8 mi (1.3 km) north of village of Constantia.	38.4	1966-68‡, 1969, 1971-78	10-17-77 4- 1-78	5.08 5.08	- -
04249011	Wine Creek at Oswego, NY	Lat 43°27'43", long 76°28'43", Oswego County, at culvert on U.S. Highway 104, 0.3 mi (0.5 km) west of east city limits of City of Oswego, and 1.4 mi (2.3 km) upstream from mouth.	3.11	1976-78	3-23-78	11.37	-
04249050	Catfish Creek at New Haven, NY	Lat 43°29'00", long 76°19'34", Oswego County, at bridge on State Highway 104B, at New Haven, 1.4 mi (2.3 km) upstream from mouth.	31.7	1962-66, 1968-78	4- 1-78	4.76	322
042490673	North Branch Grindstone Creek near Altmar, NY	Lat 43°29'31", long 76°05'41", Oswego County, at culvert on Hong Kong Road, 4.1 mi (6.6 km) upstream from confluence with South Branch Grindstone Creek, and 4.1 mi (6.6 km) southwest of Altmar.	11.2	1976-78	4- 1-78	9.13	258
04250695	Staplin Creek at Rutland Center, NY	Lat 43°57'31", long 75°48'24", Jefferson County, at culvert on Miser Hill Road, 0.3 mi (0.5 km) north of Rutland Center, 3.4 mi (5.5 km) east of Watertown, and 3.8 mi (6.1 km) upstream from confluence with Boynton Creek.	1.84	1976-78	4- 1-78	3.29	52
04250752	Sandy Creek tributary No. 2 near Woodville, NY	Lat 43°45'59", long 76°12'02", Jefferson County, at culvert 250 ft (76 m) north of Southwick Road, 0.2 mi (0.3 km) west of junction of State Highways 3 and 193, 1.9 mi (3.0 km) northwest of Woodville.	4.26	1969-71, 1976-78	4- 1-78	16.21	-
04256040	Mill Creek tributary near Lowville, NY	Lat 43°45'43", long 75°31'13", Lewis County, at culvert on West Road, 2.0 mi (3.2 km) southwest of Lowville, and 2.2 mi (3.5 km) upstream from mouth.	1.68	1976-78	1-14-78	10.78	120
04258700	Deer River at Deer River, NY	Lat 43°55'49", long 75°35'31", Lewis County, on left bank 350 ft (107 m) upstream from bridge on State Highway 26 at Deer River, and 2 mi (3.2 km) upstream from mouth.	98.1	1957-69‡, 1977	4-14-78	6.35	7,300
04260575	Horse Creek tributary near Dexter, NY	Lat 44°04'47", long 76°03'28", Jefferson County, at bridge on Weaver Road, 0.3 mi (0.5 km) upstream from mouth, 1.0 mi (1.6 km) southwest of Reynolds Corners, and 5.1 mi (8.2 km) north of Dexter.	4.59	1976-77	3-23-76 3-13-77 4- 1-78	R11.10 R14.43 13.58	- 700 -
		Streams tributary to St. Lawrence River					
04264200	Little Sucker Brook at Waddington, NY	Lat 44°50'28", long 75°11'28", St. Lawrence County, on left bank, on downstream side of bridge on State Highway 345, 0.6 mi (1.0 km) south of Waddington, and 3.9 mi (6.3 km) upstream from mouth.	19.9	1959-60‡, 1961-69, 1971-78	4-14-78	3.98	-

‡ Operated as a continuous-record gaging station.
R Revised.

Annual maximum discharge at crest-stage partial-record stations during water year 1978--Continued

Station No.	Station name	Location	Drainage area (mi²)	Period of record	Annual maximum Date	Annual maximum Gage height (feet)	Annual maximum Discharge (ft³/s)
		Streams tributary to St. Lawrence River--Continued					
04264300	Brandy Brook near Waddington, NY	Lat 44°49'42", long 75°04'32", St. Lawrence County, at bridge on Halfway House Road, 3.2 mi (5.1 km) southeast of Waddington, and 4.4 mi (8.2 km) upstream from mouth.	27.0	1959-63‡, 1964-69, 1976-78	5-20-76 5-13-77 4- 5-78	6.68 8.75 9.07	R454 - -
04265100	Elm Creek near Hermon, NY	Lat 44°26'14", long 75°12'52", St. Lawrence County, on left bank, 100 ft (30 m) downstream from highway bridge, 2.3 mi (3.7 km) south of Hermon, and 6.8 mi (10.9 km) upstream from confluence with Tanner Creek.	33.0	1958-68‡, 1969-78	4-10-78	6.55	526
04267700	Parkhurst Brook near Potsdam, NY	Lat 44°39'11", long 74°58'15", St. Lawrence County, at bridge on State Highways 56 and 72, 0.3 mi (0.5 km) upstream from mouth, and 1.2 mi (1.9 km) southeast of Campus of State University of New York, College of Education at Potsdam.	17.8	1958-63‡, 1964-77	4- 5-78	7.65	-
04267800	Trout Brook at Allen Corners, NY	Lat 44°47'33", long 75°01'59", St. Lawrence County, at abandoned bridge off State Highway 56A, at Allen Corners, and 2 mi (3 km) southwest of Norfolk.	56.2	1958-63‡, 1964-76, 1967-74, 1976-78	9- 3-59 1-26-67 5- 6-72 3-25-73 4-15-78	8.41 9.14 10.28 10.74 10.20	R907 R1,230 R1,720 R1,990 1,680
04268200	Plum Brook at Grantville, NY	Lat 44°52'45", long 74°54'52", St. Lawrence County, at bridge on Grant Road, 0.7 mi (1.1 km) downstream from unnamed tributary, 1.1 mi (1.8 km) upstream from mouth, 1.4 mi (2.3 km) north of Grantville, and 2.3 mi (3.7 km) southwest of Massena city limits.	37.6	1958-63‡, 1964, 1966-68, 1971-78	4- 5-74 4-20-75 3-14-77 4-14-78	R6.71 6.27 6.72 6.33	R1,420 1,130 R1,420 1,150
04268720	Hopkinton Brook at Hopkinton, NY	Lat 44°40'59", long 74°41'58", St. Lawrence County, at bridge on town road, 0.4 mi (0.6 km) upstream from unnamed tributary, 0.6 mi (1.0 km) south of Hopkinton, and 2.0 mi (3.2 km) upstream from mouth.	18.5	1967, 1969, 1973-74, 1976-78	4- 3-67 4-11-69 3-18-73 4- 5-74 4- 1-78	3.21 3.26 3.93 3.49 4.67	R- R- R- R- -
04268800	West Branch St. Regis River near Parishville, NY	Lat 44°35'52", long 74°44'19", St. Lawrence County, at highway bridge, 4.1 mi (6.6 km) downstream from Mud Pond Outlet, 4.2 mi (6.8 km) southeast of Parishville, and 4.8 mi (7.7 km) upstream from Niagara Mohawk Power Corp. dam.	172	1976-78	4-14-78	4.26	2.110
04268900	Trout Brook at Stockholm Center, NY	Lat 44°46'16", long 74°48'47", St. Lawrence County, at bridge on town road, 0.7 mi (1.1 km) upstream from mouth, and 1.0 mi (1.6 km) northeast of Stockholm Center.	44.9	1959-60‡, 1961-67, 1970-74, 1976-78	4- 1-78 4-13-78	b5.02 4.53	- -
04269050	Allen Brook near Brasher Falls, NY	Lat 44°48'07", long 74°43'40", St. Lawrence County, at bridge on U.S. Highway 11, 0.8 mi (1.3 km) upstream from mouth, and 2.2 mi (3.5 km) east of Brasher Falls.	16.0	1961-66‡, 1967-74, 1976-78	10- 17-77	4.86	908
04269100	Lawrence Brook near Moira, NY	Lat 44°50'22", long 74°35'46", Franklin County, at highway bridge, 2.4 mi (3.9 km) northwest of Moira, and 5.4 mi (8.7 km) upstream from mouth.	28.0	1959-60‡, 1961-78	10-19-77	6.12	990

‡ Operated as a continuous-record gaging station.
b Ice jam.
R Revised.

Annual maximum discharge at crest-stage partial-record stations during water year 1978--Continued

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (ft^3/s)
		Streams tributary to St. Lawrence River--Continued					
04269500	Deer River at Brasher Iron Works, NY	Lat 44°53'32", long 74°41'28", St. Lawrence County, 400 ft (122 m) upstream from highway bridge, at Brasher Iron Works, 2.6 mi (4.2 km) southeast of Helena, 3.6 mi (5.8 km) upstream from mouth, and 3.8 mi (6.1 km) downstream from Lawrence Brook.	189	1913-16‡, 1959-68‡, 1969, 1971-74, 1976-78	4-20-78	4.65	1,410
04270100	West Branch Deer Creek at Fort Covington Center, NY	Lat 44°56'49", long 74°28'49", Franklin County, at highway bridge, 0.8 mi (1.3 km) west of Fort Covington Center, 2.1 mi (3.4 km) upstream from East Branch, and 3.1 mi (5.0 km) south Fort Covington.	31.4	1962-74, 1976-78	4-13-78	6.74	-
04270150	East Branch Deer Creek at Fort Covington Center, NY	Lat 44°56'52", long 74°27'51", Franklin County, at highway bridge, at Fort Covington Center, 1.9 mi (3.1 km) upstream from West Branch, and 3.2 mi (5.1 km) south of Fort Covington.	23.1	1961-62‡, 1963-74, 1976-78	4-14-78	5.16	471
04270700	Trout River at Trout River, NY	Lat 44°59'23", long 74°17'56", Franklin County, at bridge on county highway, 0.2 mi (0.3 km) east of State Highway 30, at Trout River, 0.5 mi (0.8 km) upstream from international boundary, 1.5 mi (2.4 km) downstream from unnamed tributary, and 3.3 mi (5.3 km) downstream from Little Trout River.	107	1960-66‡, 1967-74, 1976-78	4-14-78	6.68	4,160
04270800	English River near Mooers Forks, NY	Lat 44°58'32", long 73°39'49", Clinton County, at highway bridge, 1.6 mi (2.6 km) upstream from unnamed tributary, 1.7 mi (2.7 km) northwest of Mooers Forks, and 2.5 mi (4.0 km) upstream from international boundary.	40.8	1960-68‡, 1969, 1971-74, 1976-78	4-14-78	5.27	-
04273700	Salmon River at South Plattsburgh, NY	Lat 44°38'24", long 73°29'43", Clinton County, on left bank, at bridge on Salmon River Road, at South Plattsburgh, 0.4 mi (0.6 km) west of State Highway 22, and 3.9 mi (6.3 km) upstream from mouth.	61.9	1960-68‡, 1969, 1971-78	10-17-77	5.02	1,250
04276200	Bouquet River at New Russia, NY	Lat 44°09'51", long 73°36'30", Essex County, at county highway bridge, 0.2 mi (0.3 km) east of State Highway 9, at New Russia.	37.6	1949, 1951, 1953, 1956-68, 1971-73, 1976-78	10-17-77	10.95	2,190

‡ Operated as a continuous-record gaging station.

Discharge measurements made at miscellaneous sites during water year 1978

Stream	Tributary to	Location	Drainage area (mi²)	Measured previously (water years)	Measurements Date	Measurements Discharge (ft³/s)
		Hudson River basin				
01331095[c] Hudson River	Atlantic Ocean	Lat 42°56'16", long 73°39'04", Saratoga County, at bridge on State Highway 67, at Stillwater, and 0.9 mi (1.4 km) upstream from Hoosic River.		1967 1977	3-31-78 4-25-78 6- 2-78 6- 8-78 6-19-78 6-26-78 7- 5-78	9,200 14,200 6,810 5,990 3,280 1,470 854
01335770[c] Hudson River	Atlantic Ocean	Lat 42°47'19", long 73°40'28", Saratoga County, at bridge on U.S. Highway 4, at Waterford, and 2.6 mi (4.2 km) upstream from the Federal Locks at Troy.		1967 1976-77	10-18-77 5- 2-78 7- 5-78 9- 5-78 9-26-78	36,800 13,700 993 940 3,020
01337700 Deans Creek	Oriskany Creek	Lat 43°06'55", long 75°24'14", Oneida County, at bridge on State Highway 233, at Westmoreland.		1968 1977	9- 1-77 9-15-77	r5.92 4.57
01337720 Deans Creek Tributary	Deans Creek	Lat 43°07'09", long 75°24'02", Oneida County, at bridge on downstream road, at Westmoreland, 0.1 mi (0.2 km) upstream from mouth.			9- 1-77 9-15-77	.04 T
01349075 Brimstone Creek	Canajoharie Creek	Lat 42°48'00", long 74°31'01", Schoharie County, at bridge on State Highway 10, 0.1 mi (0.2 km) north of Sharon Springs, and 0.8 mi (1.3 km) north of U.S. Highway 20.	2.44	1977	9-15-77	1.26
01349080 Brimstone Creek	Canajoharie Creek	Lat 42°49'20", long 74°35'40", Montgomery County, at bridge on State Highway 10, 0.2 mi (0.3 km) north of county line, 1.2 mi (1.9 km) south of Ames, and 2.4 mi (3.9 km) upstream from mouth.	7.61	1974	9- 1-77 9-15-77	1.56 .29
01359642 Moordener Kill	Hudson River	Lat 42°33'38", long 73°38'38", Rensselaer County, at abandoned bridge about 0.6 mi (1.0 km) west of East Schodack.			7-19-77 7-21-77	.73 .67
01372016 Rhinebeck Kill	Landsman Kill	Lat 41°56'24", long 73°54'57", Dutchess County, at bridge on Old Post Road at Rhinebeck boundary.	7.24		7-28-77	.97
01372044 Twaalfskill Creek	Hudson River	Lat 41°41'42", long 73°59'08", Ulster County, at bridge on State Highway 55, 2.1 mi (3.4 km) southwest of Highland.	3.59		7-27-77	.18
01373670 Moodna Creek	Hudson River	Lat 41°25'43", long 74°07'03", Orange County, about 1,000 ft (305 m) below dam at Salisbury Mills.			8-16-77 8-30-77	6.55 2.57
01373675 Moodna Creek	Hudson River	Lat 41°25'33", long 74°05'17", Orange County, at bridge on Otterkill Road, 100 ft (30 m) east of Taylor Road, and 1.0 mi (1.6 km) southwest of West Cornwall.			8-31-77	*3.76
01373680 Woodbury Creek	Moodna Creek	Lat 41°22'30", long 74°07'17", Orange County, at bridge on Pine Hill Road, at Highland Mills.			8-16-77	.69
†01373690 Woodbury Creek	Moodna Creek	Lat 41°22'00", long 74°06'17", Orange County, on left bank, 40 ft (12 m) downstream from culvert-type bridge on road to Atlantic Coast Aggregate Corp. plant, 1,200 ft (366 m) downstream from bridge on State Highway 32, and 1.9 mi (3.1 km) north of Highland Mills.	11.2		8-16-77 8-17-77	*1.6 6.9

* Base flow.
† Also a crest-stage partial-record station.
c Water-quality data included in this report.
r Revised.
T Trace.

Discharge measurements made at miscellaneous sites during water year 1978--Continued

Stream	Tributary to	Location	Drainage area (mi²)	Measured previously (water years)	Measurements Date	Measurements Discharge (ft³/s)
		Hudson River basin--Continued				
01373700 Woodbury Creek	Moodna Creek	Lat 41°24'05", long 74°04'48", Orange County, at bridge on Taylor Road, 0.3 mi (0.5 km) south of Mountainville, and 0.5 mi (0.8 km) upstream from mouth.	22.2		8- 3-77 8-16-77 8-18-77	*3.75 2.83 4.56
01374488 Brady Brook	East Branch Croton River	Lat 41°31'54", long 73°35'08", Dutchess County, at bridge on State Highway 22, 1.6 mi (2.6 km) south of Pawling boundary, and 1.0 mi (1.6 km) upstream from mouth.	7.80		7-27-77	.85
01374489 East Branch Croton River	Croton River	Lat 41°30'51", long 73°35'56", Putnam County, at bridge on State Highway 311, 0.4 mi (0.6 km) west of Akins Corners.	17.3		7-27-78	1.19
01374491 Stephens Brook	East Branch Croton River	Lat 41°30'30", long 73°35'15", Putnam County, at bridge on State Highway 22, 1.0 mi (1.6 km) southeast of Patterson, and 0.7 mi (1.1 km) upstream from mouth.	1.45		7-27-77	1.4
		Delaware River basin				
01417300 Baxter Brook	East Branch Delaware River	Lat 42°01'29", long 75°06'52", Delaware County, at bridge on State Highway 30, 0.25 mi (0.4 km) upstream from mouth, at Harvard.	14.2	1959-64 1966-68 1977	1-12-78	70
01421200 Cadosia Creek	East Branch Delaware River	Lat 41°58'03", long 75°15'51", Delaware County, at bridge on State Highway 236, 0.3 mi (0.5 km) upstream from mouth, at Cadosia.	17.7	1974-77	9- 3-76 5-31-77 6-17-77 6-29-77 7-19-77 8-22-77 9-13-77 10-13-77 4-20-78 5-23-78 6- 6-78 6-26-78 7-20-78 8-15-78	10.5 6.74 3.82 5.58 *1.83 *4.28 *2.45 51 71 44 13.4 6.6 7.56 12.8
01425665 Oquaga Creek	West Branch Delaware River	Lat 42°11'06", long 75°25'27", Broome County, at bridge on North Sanford Road, 0.3 mi (0.5 km) upstream from small tributary, 0.5 mi (0.8 km) west of Arctic, 1.3 mi (2.1 km) upstream from gaging station near North Sanford, and 2.6 mi (4.2 km) northeast of North Sanford.	1.15	1969-77	10- 5-77 9-21-78	2.37 .16
01425670 Oquaga Creek Tributary	Oquaga Creek	Lat 42°10'56", long 75°25'16", Broome County, 0.2 mi (0.3 km) upstream from mouth, 0.4 mi (0.6 km) southwest of Arctic, 0.4 mi (0.6 km) downstream from bridge on East Afton Road, and 2.5 mi (4.0 km) northwest of North Sanford.	2.37	1969-77	10- 5-77 6-15-78 9-21-78	6.40 2.06 .78
01428000 Tenmile River	Delaware River	Lat 41°33'51", long 75°00'56", Sullivan County, on left bank 0.5 mi (0.8 km) downstream from East Branch Tenmile River, 0.8 mi (1.3 km) upstream from mouth, and 0.6 mi (1.0 km) northeast of Tusten.	45.0	1946-73‡	8-15-78 8-30-78	6.87 3.28

* Base flow.

‡ Operated as a continuous-record gaging station.

Discharge measurements made at miscellaneous sites during water year 1978--Continued

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements	
					Date	Discharge (ft^3/s)
		Delaware River basin--Continued				
01436800 Bush Kill	Neversink River	Lat 41°30'34", long 74°39'20", Sullivan County, at timber bridge on dirt road, 0.4 mi (0.6 km) northwest of Oakland Valley.	19.5	1977	4-20-77 5-26-77 6-21-77 5- 8-78 5-30-78 6- 6-78 6-20-78 6-26-78 7-11-78 7-26-78 8- 9-78 8-24-78	*28 *16 *10 37 46 44 24 *16 10 7.5 20 5.6
01438000 Neversink River	Delaware River	Lat 41°21'40", long 74°41'07", Orange County, at Tristates Bridge on East Main Street (U.S. Highway 6), in Port Jervis, 450 ft (137 m) upstream from Clove Brook, and 0.6 mi (1.0 km) upstream from mouth.	346	1902-03 1943 1945 1960-62 1965-77	10- 3-75 11-18-75 12-17-75 1-28-76 3- 2-76 4-12-76 5-25-76 7-19-76 8-20-76 10-27-76 11-30-76 1-14-77 4- 6-77 5-18-77 7- 6-77 9- 2-77 1- 5-78 4-11-78 6-28-78 8-14-78	358 739 361 4,590 760 415 418 235 237 1,140 311 151 2,350 340 110 162 396 932 202 190
		Susquehanna River basin				
†01496370 Mink Creek	Canadarago Lake	Lat 42°50'55", long 75°00'10", Otsego County, at bridge on State Highway 28, 0.4 mi (0.6 km) southwest of Richfield Springs, and 1 mi (1.6 km) upstream from mouth.	10.4	1963 1968-77	11-22-77 4-13-78	26 71
01496390 Hyder Creek	Canadarago Lake	Lat 42°49'00", long 75°01'12", Otsego County, at bridge on State Highway 28, 0.4 mi (0.6 km) upstream from mouth, and 3 mi (4.8 km) southwest of Richfield Springs.	9.52	1963	11-22-77	24
01496448 Herkimer Creek	Canadarago Lake	Lat 42°47'19", long 75°01'30", Otsego County, at bridge on State Highway 28, 0.5 mi (0.8 km) upstream from mouth, and 0.6 mi (1.0 km) north of Schuyler Lake.	12.6	1963 1968-77	11-22-77	28
01499210 Susquehanna River	Atlantic Ocean	Lat 42°21'59", long 75°14'44", Otsego and Delaware County line, at bridge at Wells Bridge.			6- 9-77 6-21-77	371 365
01501004 c/ Mill Brook	Unadilla River	Lat 42°38'13", long 75°21'07", Chenango County, at culvert on Sherburne Turnpike, 0.5 mi (0.8 km) northwest of New Berlin, and 1.6 mi (2.6 km) upstream from mouth.	1.78	1975-77	5-26-78 6-21-78 7-25-78 8-31-78 9-28-78	*1.02 *1.03 *1.32 .20 *.32
01501008 c/ Mill Brook Tributary	Mill Brook	Lat 42°37'34", long 75°21'06", Chenango County, at culvert on town highway, 0.4 mi (0.6 km) west of New Berlin, and 0.7 mi (1.1 km) upstream from mouth.	1.70	1975-77	5-26-78 6-21-78 7-25-78 8-31-78 9-28-78	*1.2 *1.2 *.24 .83 *.99
01502708 Susquehanna River	Atlantic Ocean	Lat 42°11'37", long 75°36'05", Broome County, at bridge at Nineveh, 0.7 mi (1.1 km) upstream from mouth at Wylie Brook.			6- 8-77	793

* Base flow.
† Also a crest-stage partial-record station.
c Water-quality data included in this report.

Discharge measurements made at miscellaneous sites during water year 1978--Continued

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements	
					Date	Discharge (ft^3/s)
		Susquehanna River basin--Continued				
01503950 Callahan Brook	Chenango River	Lat 42°53'56", long 75°39'09", Madison County, at bridge on Reservoir Road, at Morrisville, 250 ft (76 m) downstream from reservoir outlet stream, and 1.6 mi (2.6 km) upstream from Electric Light Stream.		1972 1977	11- 2-77	*11
01503953 Chenango River	Susquehanna River	Lat 42°53'17", long 75°38'39", Madison County, at sewer outlet headwall, 0.1 mi (0.2 km) downstream from bridge on County Highway 105, Morrisville-Eaton Road between Morrisville and West Eaton, 0.8 mi (1.3 km) upstream from Electric Light Stream, and 0.2 mi (0.3 km) south of Morrisville boundary.	11.8	1977	10-17-77 11-30-77 4-12-78 5-17-78 6-21-78 8- 1-78 8-29-78	308 25 114 13.0 5.0 6.3 3.1
†01503980 Chenango River	Susquehanna River	Lat 42°51'02", long 75°36'21", Madison County, at bridge on London Road at Eaton, 0.1 mi (0.2 km) upstream from Eaton Brook, and 0.1 mi (0.2 km) downstream from State Highway 26.	24.3	1964-65 1970-72 1977	11- 2-77	32
01504050 Chenango River	Susquehanna River	Lat 42°47'52", long 75°34'16", Madison County, at bridge on Hamilton Road at Randallsville, and 0.8 mi (1.3 km) upstream from Payne Brook.		1971	11- 2-77	*106
01504310 Payne Brook	Chenango River	Lat 42°49'02", long 75°32'58", Madison County, at bridge upstream from sewage disposal plant in Hamilton, and 2.4 mi (3.9 km) upstream from mouth.	11.0	1969-71	11- 3-77	56.1
01504390 Chenango River	Susquehanna River	Lat 42°45'07", long 75°33'18", Madison County, at bridge on Nower Road, 0.3 mi (0.5 km) northwest of Earlville.			11- 2-77	*184
01505010 Chenango River	Susquehanna River	Lat 42°37'38", long 75°30'06", Chenango County, at bridge on Steam Sawmill Hill Road, 1.5 mi (2.4 km) northeast of North Norwich, and 2.0 mi (3.2 km) upstream from Fly Creek.		1971	11- 1-77	*421
01505040 Chenango River	Susquehanna River	Lat 42°31'57", long 75°30'24", Chenango County, at bridge on Main Street in Norwich, 0.6 mi (1.0 km) downstream from Ransford Creek.			11- 1-77	*485
01505810 Chenango River	Susquehanna River	Lat 42°26'30", long 75°35'48", Chenango County, at bridge in Oxford, 0.1 mi (0.2 km) downstream from Clark Creek.			11- 1-77	*695
01506280 Chenango River	Susquehanna River	Lat 42°21'52", long 75°40'47", Chenango County, at bridge on county highway at Brisben, and 2.2 mi (3.5 km) downstream from Glen Road Brook.		1971	10-31-77	*828
01508800$^{c/}$ Factory Brook	West Branch Tioughnioga River	Lat 42°38'39", long 76°11'19", Cortland County, at bridge on State Highway 41, about 1 mi (1.6 km) upstream from mouth at bridge on State Highway 281, 0.9 mi (1.4 km) upstream from mouth, in Homer.	15.8	1962-66 1970 1972-77	11-15-77 2-13-78 5- 9-78 9- 1-78	31 20 28.7 2.9

* Base flow.
† Also a crest-stage partial-record station.
c Water-quality data included in this report.

Discharge measurements made at miscellaneous sites during water year 1978--Continued

Stream	Tributary to	Location	Drainage area (mi²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft³/s)
		Susquehanna River basin--Continued				
01509530 Tioughnioga River	Susquehanna River	Lat 42°19'50", long 75°58'04", Broome County, at State Highway 79 and U.S. Highway 11 at Whitney Point, 500 ft (152 m) upstream from Otselic River.			6- 1-77	*237
01516000 Cayuta Creek	Susquehanna River	Lat 42°00'32", long 76°31'33", Tioga County, at bridge on Ithaca Street, Waverly, 2.4 mi (3.9 km) upstream from mouth.	140	1962-76	5- 5-76 4- 4-78	176 659
01529100 Cohocton River	Chemung River	Lat 42°17'20", long 77°13'37", Steuben County, at new bridge on State Highway 226 at Savona, 0.4 mi (0.6 km) west of old U.S. Highway 15.			8-25-76	*104
01530274 c/ Gardner Creek Tributary	Gardner Creek	Lat 42°09'14", long 76°57'58", Chemung County, at culvert on County Line Road, 0.7 mi (1.1 km) north of intersection with Davenport Road, 2.3 mi (3.8 km) upstream from mouth, and 2 mi (3.2 km) northwest of Big Flats.			5-24-78 6-19-78 7-24-78 8-29-78 9-26-78	*2.2 .26 *e.05 *e.05 *e.06
01532076 c/ Gardner Creek Tributary	Gardner Creek	Lat 42°08'15", long 76°57'11", Chemung County, at culvert on State Highway 17, 0.6 mi (1.0 km) upstream from mouth, and 0.9 mi (1.4 km) west of Big Flats.			5-24-78 6-19-78 7-24-78 8-29-78 9-26-78	*2.8 .03 0 0 0
01530278 c/ Gardner Creek	Chemung River	Lat 42°07'57", long 76°56'15", Chemung County, at bridge on State Highway 352 immediately south of Big Flats, and 0.5 mi (0.9 km) upstream from mouth.			5-24-78 6-19-78 7-24-78 8-29-78 9-26-78	*9.5 *2.6 *1.5 *.67 *2.4
		Allegheny River basin				
03010831 s/ Two Mile Creek	Allegheny River	Lat 42°05'28", long 78°27'00", Cattaraugus County, 760 ft (232 m) upstream from Buffalo Street, at the former Avenue A Bridge, at Olean.			5- 8-78	1.0
†03012837 West Branch Conewango Creek Tributary	West Branch Conewango Creek	Lat 42°21'55", long 79°10'17", Chautauqua County, at culvert on Hamlet Road, 0.1 mi (0.2 km) west of the intersection of State Highway 83 and Hamlet Road, 1.0 mi (1.6 km) upstream from mouth, and 1.9 mi (3.1 km) west of Hamlet.	6.84		3-30-77	50
03014400 Chadakoin River	Cassadaga Creek	Lat 42°05'37", long 79°14'32", Chautauqua County, 600 ft (183 m) downstream from Warner Dam, 620 ft (189 m) downstream from Washington Street, 800 ft (244 m) upstream from South Main Street in Jamestown, and 4.1 mi (6.6 km) upstream from Moon Brook.		1977	2-15-78	370
		Streams tributary to Lake Erie				
04213444 Franks Creek	Buttermilk Creek	Lat 42°27'08", long 78°39'00", Cattaraugus County, staff gage on right bank 50 ft (15 m) downstream from unnamed tributary, 0.4 mi (0.6 km) upstream from Quarry Creek, 2.0 mi (3.2 km) southwest of Thomas Corners, and 4.0 mi (6.4 km) northwest of West Valley.	.55	1977	9-21-77	712

* Base flow.
† Also a crest-stage partial-record station.
c Water-quality data included in this report.
e Estimated.
s Seepage investigation included in this report.

Discharge measurements made at miscellaneous sites during water year 1978--Continued

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements	
					Date	Discharge (ft^3/s)
		Streams tributary to Lake Erie--Continued				
04213451 Buttermilk Creek	Cattaraugus Creek	Lat 42°28'52", long 78°40'33", Cattaraugus County, at bridge on Thomas Corners Road, 0.2 mi (0.3 km) upstream from mouth, 0.25 mi (0.4 km) east of Dutch Hill Road, and 1.4 mi (2.3 km) south of Springville.			3-20-75 4-16-75 7-13-78	204 73 e5.2
		Streams tributary to Niagara River				
04216430 Tonawanda Creek	Niagara River	Lat 42°54'13", long 78°15'00", Genesee County, at bridge on U.S. Highway 20, at Alexander.	98.2		9-20-77 9-21-77	1,090 870
04218030 Tonawanda Creek	Niagara River	Lat 43°05'10", long 78°41'50", Erie-Niagara Counties, at bridge on State Highway 78 in Millerport, 0.5 mi (0.8 km) upstream from Mud Creek, and 2.4 mi (3.8 km) upstream from Erie (Barge) Canal.	363	1951 1977	9-23-77 9-28-77	3,610 4,870
		Streams tributary to Lake Ontario				
†04220045 Oak Orchard Creek	Lake Ontario	Lat 43°10'25", long 78°23'13", Orleans County, on left bank, at bridge on Harrison Road, 0.2 mi (0.3 km) east of State Highway 63, 1.1 mi (1.8 km) south of Shelby, and 4.7 mi (7.6 km) upstream from Erie (Barge) Canal crossing at Medina.	150	1903 1949 1955 1960 1976-77	10-6-77	533
04220458[c] Dyke Creek	Genesee River	Lat 42°09'10", long 77°46'56", Allegany County, at culvert on Independence Road, about 300 ft (91 m) north of intersection with State Highway 17, and 0.7 mi (1.1 km) east of Andover.			5-25-78 6-20-78 7-27-78 8-30-78 9-27-78	*30 *7.9 12 *2.4 *2.0
04220462[c] East Valley Creek	Railroad Brook	Lat 42°09'56", long 77°47'14", Allegany County, at bridge on East Valley Road, in Andover, and 0.4 mi (0.6 km) upstream from mouth.	7.29	1972-74	5-25-78 6-20-78 7-27-78 8-30-78 9-27-78	*8.9 *2.3 4.1 *1.2 *.98
04220489[c] Dyke Creek	Genesee River	Lat 42°07'46", long 77°55'03", Allegany County, at bridge on road 0.3 mi (0.5 km) south of intersection with State Highway 417, about 1.5 mi (2.4 km) east of Wellsville, and 1.9 mi (3.1 km) upstream from mouth.			5-25-78 6-20-78 7-27-78 8-30-78 9-27-78	*79 *23 28 *7.3 *7.7
04221725 Genesee River	Lake Ontario	Lat 42°17'46", long 78°04'33", Allegany County, at transit bridge, at intersection of State Highways 19 and 408, 0.3 mi (0.5 km) downstream from Angelica Creek, and 2.3 mi (3.7 km) west of Angelica.	577	1975-77	8- 6-75 8-25-76 1-18-77 6-22-77 7-12-77 8-23-77	114 125 148 152 1,840 650
04222300 Genesee River	Lake Ontario	Lat 42°26'14", long 78°07'48", Allegany County, at bridge on town highway between State Highway 19 and Ballard Road, 1.4 mi (2.3 km) northeast of Houghton.		1970-71 1977	10-11-77	1,180
04224740 Sugar Creek	Canaseraga Creek	Lat 42°30'07", long 77°44'43", Livingston County, at bridge on county road, 1.6 mi (2.6 km) upstream from mouth, and 3.4 mi (5.5 km) north of Canaseraga.	19.2	1974-77	10-20-77	45

* Base flow.
† Also a crest-stage partial-record station.
c Water-quality data included in this report.
e Estimated.

Discharge measurements made at miscellaneous sites during water year 1978--Continued

Streams tributary to Lake Ontario--Continued

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements Date	Measurements Discharge (ft^3/s)
04224848 Stony Brook	Canaseraga Creek	Lat 42°31'20", long 77°41'22", Livingston County, at footbridge in Stony Brook State Park, 0.3 mi (0.5 km) south of the north (lower) park entrance, and 2.7 mi (4.3 km) south of Dansville.	20.8	1974-77	10-20-77	62
04224930 Mill Creek	Canaseraga Creek	Lat 42°32'16", long 77°37'35", Steuben County, at culvert on county highway at Perkinsville, and 0.1 mi (0.2 km) downstream from unnamed tributary.		1977	4-26-77 5-26-77 6-22-77 7- 8-77 7-20-77 8- 9-77 8-24-77	46 20 17 97 17 16 46
04224940 Mill Creek	Canaseraga Creek	Lat 42°32'16", long 77°40'23", Livingston County, on right bank, 250 ft (76 m) upstream from Stone Falls Road bridge, 0.9 mi (1.4 km) southeast of Dansville, and 2.8 mi (4.5 km) upstream from mouth.	22.0	1976-77	7-28-76 8- 4-76 8-10-76 9-16-76 1-13-77 6-30-77 8-17-77 9-21-77 9-26-77 9-27-77 9-30-77	28.0 33.2 27.7 16.1 14.2 16.0 98.0 101 131 90 42
04224978 Mill Creek	Canaseraga Creek	Lat 42°33'12", long 77°41'44", Livingston County, at bridge on Knox Road, in Dansville, and 0.9 mi (1.4 km) upstream from mouth.	35.9	1974-77	10- 3-77	139
04225500 Canaseraga Creek	Lake Ontario	Lat 42°39'40", long 77°46'07", Livingston County, at bridge on State Highway 258, 0.1 mi (0.2 km) west of Groveland, and 0.1 mi (0.2 km) downstream from small tributary.	181	1974-77	1-14-77 2-15-77 3-21-77 6-23-77	66 21 278 56
04225600 Bradner Creek	Canaseraga Creek	Lat 42°34'49", long 77°44'20", Livingston County, at bridge on old state highway, about 150 ft (46 m) upstream from State Highway 36, 0.4 mi (0.6 km) northwest of Woodsville, 1.5 mi (2.4 km) northwest of Dansville, and 8.5 mi (13.7 km) upstream from mouth.	7.45	1964-65 1970-72 1974-77	10- 4-77	18
04225670 Bradner Creek	Canaseraga Creek	Lat 42°41'03", long 77°47'55", Livingston County, at bridge on Pioneer Road, 300 ft (90 m) upstream from the mouth, and 1.7 mi (2.7 km) east of Sonyea.	16.5	1974-77	1-14-77 2-15-77 3-25-77 6-23-77	10 35 85 6.6
04225915 Keshequa Creek	Canaseraga Creek	Lat 42°35'19", long 77°55'14", Livingston County, at bridge on Bailey Road, 0.4 mi (0.6 km) northeast of Nunda.	32.6	1974-77	10- 5-77	46
04225950 Keshequa Creek	Canaseraga Creek	Lat 42°38'17", long 77°52'01", Livingston County, on downstream side of bridge on State Highway 258, 100 ft (30 m) downstream from tributary in Wildcat Gully, and 0.5 mi (0.8 km) north of Tuscarora.	58.6	1974-77	10- 5-77	84
04230320 Oatka Creek	Genesee River	Lat 42°41'39", long 78°07'15", Wyoming County, at bridge on State Highway 19, 0.6 mi (0.9 km) north of Rock Glen, and 1.2 mi (1.9 km) southeast of South Warsaw.	16.0	1974-77	10- 6-77	25

Discharge measurements made at miscellaneous sites during water year 1978--Continued

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements	
					Date	Discharge (ft^3/s)
		Streams tributary to Lake Ontario--Continued				
04230410 Pearl Creek	Oatka Creek	Lat 42°50'55", long 78°02'36", Wyoming County, at bridge on State Highway 19, 0.2 mi (0.3 km) east of Pearl Creek, and 1.0 mi (1.6 km) upstream from mouth.	10.9	1970-72 1975-77	10- 4-77	38
04230423 Oatka Creek	Genesee River	Lat 42°55'43", long 78°02'20", Genesee County, at bridge on Junction Road, 1.6 mi (2.6 km) northwest of Pavilion Center, and 3.7 mi (6.0 km) northwest of Pavilion.	111	1974-77	10- 6-77	267
042320502 c/ Irondequoit Creek	Lake Ontario	Lat 43°09'27", long 77°31'27", Monroe County, at bridge on Browncroft Boulevard (State Highway 286A), 0.6 mi (1.0 km) east of State Highway 47, and 2.2 mi (3.5 km) upstream from mouth.	133	1976-77	11- 5-76 12- 8-76 2-16-77 3-16-77 4-28-77 5-26-77 6-30-77 7-27-77 8-30-77 9-21-77 10-27-77 11-16-77 2-15-78 3-15-78 4-14-78 5-10-78 6- 7-78 7-13-78 8-25-78 9-13-78	153 119 116 268 201 88.4 84.1 41.0 90.6 386 128 325 126 901 145 190 89.9 63.0 67.8 84.6
04233550 Cascadilla Creek	Cayuga Inlet	Lat 42°26'32", long 76°25'45", Tompkins County, at bridge on on Turkey Hill Road, 1.0 mi (1.6 km) south of Varna, and 2.5 mi (4.0 km) north of Bethel Grove.		1965	4- 3-78	48
04234530 Feeder Canal-Canandaigua Outlet	Canandaigua Outlet	Lat 42°53'12", long 77°15'58", Ontario County, at bridge on Phelps Road, 0.9 mi (1.4 km) downstream from dam on Canandaigua Lake, at Canandaigua.			6- 6-78 7-19-78	33.2 6.17
04234550 Canandaigua Outlet	Erie Canal	Lat 42°54'07", long 77°14'48", Ontario County, at bridge on Castle Road, 1.0 mi (1.6 km) downstream from Feeder Canal, and 1.1 mi (1.8 km) east of Canandaigua.			6- 6-78 7-18-78	44.8 9.82
04235011 Canandaigua Outlet	Erie Canal	Lat 42°56'36", long 77°13'19", Ontario County, at bridge on County Road 19, 1.1 mi (1.8 km) downstream from Freshbur Creek, at Littleville.			6- 7-78 7-18-78	48.0 13.2
04235022 Canandaigua Outlet	Erie Canal	Lat 42°58'10", long 77°13'42", Ontario County, at bridge on East Main Street, 1.0 mi (1.6 km) upstream from Black Brook, at Manchester.			6- 7-78	52.3
04240121 Ley Creek Tributary	Ley Creek	Lat 43°04'38", long 76°10'22", Onondaga County, at culvert in dump in Syracuse, 0.1 mi (0.2 km) upstream from mouth, 0.5 mi (0.8 km) upstream from Onondaga Lake, and 0.1 mi (0.2 km) north of bridge over Ley Creek on Park Street.	.39	1971-77	12-14-76 11- 3-77 3-20-78 5-26-78 6-27-78	1.36 .54 1.49 .46 .60

c Water-quality data included in this report.

Discharge measurements made at miscellaneous sites during water year 1978--Continued

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements Date	Measurements Discharge (ft^3/s)
Streams tributary to Lake Ontario--Continued						
04240135 Bloody Brook	Onondaga Lake	Lat 43°05'51", long 76°12'06", Onondaga County, 200 ft (61 m) upstream from bridge on State Highway 57, at Liverpool, and 0.2 mi (0.3 km) upstream from mouth.	3.91	1975-77	12-18-75	3.83
					6-24-76	4.28
					7-27-76	.36
					8-26-76	*1.98
					10- 5-76	1.94
					11- 9-76	4.18
					12-14-76	3.92
					5- 2-77	5.18
					6-15-77	*1.35
					7-12-77	200
					8-16-77	2.29
					2-15-78	3.26
					3-16-78	16.2
					5-25-78	2.40
					6-27-78	1.90
					8-10-78	4.63
					9- 8-78	1.28
04240255 Geddes Brook	Ninemile Creek	Lat 43°04'13", long 76°13'54", Onondaga County, at end of Horan Road, upstream from Allied Chemical waste beds, 0.2 mi (0.3 km) northeast of intersection of Horan Road and Gere Lock Road, and 0.4 mi (0.6 km) upstream from mouth.			7-20-77	*8.73
					9- 1-77	*6.83
04240470 Sawmill Creek	Onondaga Lake	Lat 43°06'55", long 76°14'07", Onondaga County, at bridge on Onondaga Lake Parkway, at Liverpool, and 200 ft (61 m) upstream from mouth.	2.34		9-23-75	1.46
					11-17-75	4.00
					6-24-76	2.07
					7-27-76	2.22
					8-26-76	.53
					10- 4-76	.60
					11- 9-76	3.33
					12-15-76	2.42
					5- 3-77	1.73
					6-14-77	*.28
					7-12-77	.42
					8-17-77	1.28
04242739 Old Erie Canal Feeder	Oneida River	Lat 43°01'56", long 76°00'51", Onondaga County, on left bank, at downstream side of bridge on village road, 50 ft (15 m) downstream from diversion spillway, 700 ft (213 m) downstream from USGS gaging station (Limestone Creek at Fayetteville 04245000), and 800 ft (244 m) north of Genesee Street, at Fayetteville.			5-23-78	6.61
					7-11-78	2.72
					8- 9-78	1.88
04244903 Limestone Creek	Oneida River	Lat 42°50'55", long 75°54'37", Onondaga County, 600 ft (183 m) north of State Highway 80 at Gooseville Corners, 4.0 mi (6.4 km) east of Fabius, and 1.6 mi (2.6 km) northwest of DeRuyter Reservoir.			8-23-76	*9.58
					11-12-76	29.2
04245003 Limestone Creek	Oneida River	Lat 43°01'56", long 76°00'51", Onondaga County, on right bank, 25 ft (8 m) downstream from dropstructure, 800 ft (244 m) downstream from bridge on Genesee Street, at Fayetteville, 700 ft (213 m) downstream from USGS gaging station (Limestone Creek at Fayetteville 04245000), and 7.75 mi (12.5 km) upstream from mouth.	85.6		5-23-78	64.5
					7-11-78	36.0
					8- 9-78	79.6
04245016 Old Erie Canal Feeder	Limestone Creek	Lat 43°02'10", long 76°00'43", Onondaga County, on left bank, at foot bridge over overflow channel, 20 ft (6 m) upstream from Limestone Creek, 2,000 ft (610 m) downstream from Limestone Creek Diversion, and 2,700 ft (823 m) downstream from USGS gaging station (Limestone Creek, at Fayetteville 04245000).			5-23-78	1.62
					7-11-78	.63
					8- 8-78	4.90

* Base flow.

Discharge measurements made at miscellaneous sites during water year 1978--Continued

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements Date	Measurements Discharge (ft^3/s)
		Streams tributary to Lake Ontario--Continued				
04245040 Bishop Brook	Limestone Creek	Lat 43°02'16", long 76°00'38", Onondaga County, on right bank, at downstream side of footbridge, 100 ft (30 m) upstream from Limestone Creek, 2,200 ft (671 m) downstream from Limestone Creek Diversion, and 2,900 ft (884 m) downstream from USGS gaging station (Limestone Creek at Fayetteville 04245000).	3.93		5-23-78 7-11-78 8- 9-78	2.82 1.09 1.07
04245247 Butternut Creek	Limestone Creek	Lat 43°02'35", long 76°03'03", Onondaga County, at center of downstream side of stone arch on Old Erie Canal, 1.0 mi (1.6 km) northeast of intersection of State Highways 5, 20, and 92 at Dewitt, and 2.2 mi (3.5 km) downstream from Meadow Brook.	58.5	1976	11-12-76	75
04247038[c] Bell Creek	Sixmile Creek	Lat 42°16'56", long 76°18'46", Oswego County, at culvert on Barnard Road, 0.7 mi (1.1 km) north of intersection with County Highway 6, and 2.1 mi (3.4 km) west of Pennellville.			5-16-78 6- 8-78 7-19-78 8-24-78 9-19-78	4.8 1.88 .12 .38 23
04252505 Mill Creek	Black River	Lat 43°28'41", long 75°20'52", Oneida County, at bridge on State Highway 294, 0.7 mi (1.1 km) southwest of Boonville, and 3.4 mi (5.5 km) upstream from mouth.	4.59	1966-67 1973-75 1977	9-16-77	6.40
04253025 Cold Brook	Black River	Lat 43°35'00", long 75°20'00", Lewis County, at bridge on Marmon Road, at Port Leyden, and 0.4 mi (0.6 km) upstream from mouth.	5.00	1967 1977	9-16-77	9.86
		Streams tributary to St. Lawrence River				
04262877 Barter Creek	Oswegatchie River	Lat 44°29'43", long 75°19'30", St. Lawrence County, at bridge on Brice Road, 0.9 mi (1.4 km) southeast of Dekalb.	1.55	1977	7-28-77	.33
04273860 West Branch Ausable River	Ausable River	Lat 44°13'11", long 73°57'56", Essex County, at bridge on county road, 1.7 mi (2.7 km) south of North Elba, 0.1 mi (0.2 km) upstream from Indian Pass Brook, and 4.2 mi (6.8 km) south of Lake Placid.			7-24-75	9.04
04273865 North Meadow Brook	West Branch Ausable River	Lat 44°13'36", long 73°54'37", Essex County, at culvert on Bobsled Road, 100 ft (30 m) downstream from Round Lake outlet, and 5.5 mi (8.8 km) southeast of Lake Placid.			7-24-75	.43
04273868 Indian Pass Brook	West Branch Ausable River	Lat 44°13'13", long 73°57'59", Essex County, at mouth, 0.1 mi (0.2 km) west of county road, 1.7 mi (2.7 km) south of North Elba, and 4.4 mi (7.1 km) south of Lake Placid.			7-24-75	4.63
04273880 West Branch Ausable River	Ausable River	Lat 44°15'25", long 73°57'46", Essex County, at bridge on State Highway 73, 1.1 mi (1.8 km) upstream from Chubb River, 1.2 mi (1.9 km) south of Lake Placid boundary line, and 1.0 mi (1.6 km) north of North Elba.			6-26-75 8-12-75 9-30-76	*29.8 26.6 84.5

* Base flow.

c Water-quality data included in this report.

Discharge measurements made at miscellaneous sites during water year 1978--Continued

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements	
					Date	Discharge (ft^3/s)
		Streams tributary to St. Lawrence River--Continued				
04273940 Outlet Brook	Chubb River	Lat 44°16'51", long 73°59'45", Essex County, at bridge on town road, in Lake Placid, directly behind the Lake Placid Center for the Arts.			7-24-75	10.5
04273970 West Branch Ausable River	Ausable River	Lat 44°16'02", long 73°57'05", Essex County, at bridge on private road, 0.4 mi (0.6 km) downstream from Chubb River, 1.3 mi (2.1 km) southeast of Lake Placid boundary line, and 1.7 mi (2.7 km) north of North Elba.			9-29-76	196
04274206 West Branch Ausable River	Ausable River	Lat 44°24'12", long 73°46'58", Essex County, at bridge on town road, 0.4 mi (0.6 km) upstream from Beaver Brook, and 1.9 mi (3.1 km) northeast of Wilmington.			8-12-75 9-29-76	68.5 269
04274208 Beaver Brook	West Branch Ausable River	Lat 44°21'16", long 73°48'40", Essex County, at bridge on town road, 0.3 mi (0.5 km) northeast of county road, 2.4 mi (3.9 km) south of Wilmington, and 2.2 mi (3.5 km) northwest of Upper Jay.			7-24-75	.15
04274210 Beaver Brook Tributary	Beaver Brook	Lat 44°21'44", long 73°49'33", Essex County, at bridge on county road, 0.8 mi (1.3 km) east of "The Flume Fall," 1.9 mi (3.1 km) south of Wilmington, and 3.1 mi (5.0 km) northwest of Upper Jay.			7-24-75	.02

SUSQUEHANNA RIVER BASIN

Tioughnioga River Tributary seepage investigation

A series of discharge estimates and observations of no flow were made Aug. 15, 1975, on a drainage tributary to Tioughnioga River downstream from Cortland, to study channel gains and losses. The reach of the main channel is 3.0 mi (4.8 km) from Page Green Road, lat 42°35'08", long 76°38'52", to the mouth. Miles shown for Tributary No. 2 are upstream of where stream is shown to end at Railroad Station, from where it is assumed to reach Tioughnioga River Tributary by underground channel. Duration figure based on records for the gaging station Tioughnioga River at Cortland (01509000). Tributary flow was considered a contribution and not a gain. Indicated gains or losses may be substantially in error as affected by inaccuracies in estimating flows too small to measure.

The measurements on each stream are listed in order proceeding downstream, and each tributary is inserted in the order in which it enters the main stream. No previous seepage investigations of this reach have been made, but other seepage investigations in this area have been published in WDR NY-75-1 and WDR NY-76-1.

Site number	Distance upstream from mouth (miles)	Measuring site	Drainage area (mi^2)	Estimated discharge (ft^3/s)	Gain or loss
				Aug. 15, 1975 at 70% duration	
		TIOUGHNIOGA RIVER TRIBUTARY:			
0150900002	3.0	at Page Green Road	0.34	0.004	--
0150900003	2.7	at Starr Road	.97	0	--
0150900004	2.4	at Main Street	1.15	0	--
0150900006	1.0	tributary No. 2 at Starr Road	1.03	0	--
0150900008	.5	tributary No. 2 at State Route 90	1.64	0	--
0150900010	1.8	at South Pendleton Street	3.52	0	--
0150900015	.8	at City Garage	3.96	.009	--
0150900016	1.1	tributary No. 3 at South Pendleton Street	.33	.03	+0.02
0150900017	1.0	at Sunnyfield Drive and Fox Hollow Road	.38	.04	+ .01
0150900020	0	at mouth	4.89	.16	+ .12

ALLEGHENY RIVER BASIN

Olean Creek seepage investigation

Two series of discharge measurements were made during the 1978 water year on Olean Creek, to study channel gains and losses. The reach is 1.4 mi (2.3 km) in length and extends from a point upstream of North Olean, lat 42°06'13", long 78°26'08", to the Main Street Bridge, 1.0 mi (1.6 km) upstream from the mouth. Duration figures are based on records for the gaging station Allegheny River at Salamanca (03011020). Tributary flow was considered a contribution and not a gain. Indicated gains or losses may be substantially in error as affected by small inaccuracies in open-channel measurements.

Site number	Distance upstream from mouth (miles)	Measuring site	Meas. disch. (ft^3/s)	Gain or loss	Meas. disch. (ft^3/s)	Gain or loss
			July 21, 1978 at 86% duration		Sept. 6, 1978 at 89% duration	
		OLEAN CREEK:				
03010805	2.4	near Kents Road at North Olean railroad crossing	26.5	--	21.4	--
03010806	1.9	at railroad bridge at North Olean	24.8	-1.7	20.5	-0.9
	1.8	withdrawal at Olean City Filter plant	-7.46	--	-7.12	--
	1.3	culvert, 0.2 mi upstream from Union Street Bridge, right bank, at North Olean	+.1	--	+.1	--
03010810	1.0	at Main Street Bridge at Olean	17.9	+.5	13.4	-.1

Twomile Creek seepage investigation

Four series of discharge measurements were made during the 1977 and 1978 water years on Twomile Creek, to study channel gains and losses. The reach is 1.9 mi (3.1 km) in length from near Johnson Street, northwest of Olean, lat 42°05'39", long 78°26'46", to State Highway 17, lat 42°04'37", long 78°28'10". Duration figures are not shown, as flow consists principally of industrial discharges. Indicated gains or losses may be substantially in error as affected by small inaccuracies in open-channel measurements.

Site number	Distance upstream from mouth (miles)	Measuring site	Meas. disch. (ft^3/s)	Gain or loss	Meas. disch. (ft^3/s)	Gain or loss	Meas. disch. (ft^3/s)	Gain or loss	Meas. disch. (ft^3/s)	Gain or loss
			Aug. 20, 1977		Sept. 1, 1977		July 16, 1978		July 26, 1978	
		TWOMILE CREEK:								
03010829	2.6	above Johnson Street	0.42	--	0.18	--				
		tributary and storm sewers	.015	--	.005	--				
030108305	--	tributary (Vanderhorst outfall)			.03	--				
03010831	2.4	above Buffalo Street Bridge					Trace	--	0.01	--
03010833	2.0	below Buffalo Street Bridge	8.20	+7.8	4.25	+4.0			6.56	+6.6
03010834	1.3	at 24th Street Bridge	9.23	+1.0	5.31	+1.1	7.01	+7.0	6.47	-0.1
03010835	.7	at State Highway 17	8.45	-0.8	4.97	-0.3	6.34	-.7	6.17	-.3

Water-quality partial-record stations are particular sites where chemical-quality, biological and/or sediment data are collected systematically over a period of years for use in hydrologic analyses. The data are collected usually less than quarterly.

SUSQUEHANNA RIVER BASIN

01530274 - GARDNER CREEK TRIBUTARY AT COUNTY LINE ROAD NEAR BIG FLATS NY
(LAT 42 09 14 LONG 076 57 58)

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
MAY , 1978 24...	1100	2.2	99	6.4	13.0	3	9.0	88	--	--	--
JUN 19...	1300	.26	148	6.8	16.0	3	9.0	94	470	190	730
JUL 24...	1200	.05	167	6.9	23.5	1	8.4	101	--	--	--
AUG 29...	1200	.05	195	7.2	21.0	1	8.8	101	310	K40	101
SEP 26...	1200	.06	195	7.1	9.0	1	12.2	107	--	--	--

DATE	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
MAY , 1978 24...	--	--	--	--	3.5	1.1	28	0	23	19	3.6
JUN 19...	51	25	14	4.0	5.8	1.4	32	0	26	22	6.6
JUL 24...	58	23	16	4.5	6.7	1.8	43	0	35	26	5.1
AUG 29...	69	23	19	5.3	8.5	1.6	57	0	47	29	5.9
SEP 26...	54	7	15	4.1	9.0	5.8	58	0	48	33	5.8

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)
MAY , 1978 24...	64	3	.05	.00	.00	.23	.28	.04	.02	--
JUN 19...	94	2	--	--	--	--	--	--	--	0
JUL 24...	105	0	.41	.00	.01	.22	.64	.01	.00	--
AUG 29...	95	9	--	--	--	--	--	--	--	0
SEP 26...	105	1	.08	.00	.00	.05	.13	.01	.01	--

DATE	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)
MAY , 1978 24...	--	--	--	--	--	--	--	--	--	.00
JUN 19...	0	<10	1	150	9	10	<.5	0	10	--
JUL 24...	--	--	--	--	--	--	--	--	--	.00
AUG 29...	2	10	1	110	3	0	<.5	0	0	--
SEP 26...	--	--	--	--	--	--	--	--	--	.00

K Results based on colony count outside the acceptable range (non-ideal colony count).

SUSQUEHANNA RIVER BASIN

01530276 - GARDNER CREEK TRIBUTARY AT STATE ROUTE 17, BIG FLATS NY
(LAT 42 08 15 LONG 076 57 11)

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
MAY , 1978											
24...	1000	2.8	142	6.2	13.0	3	8.2	80	--	--	--
JUN											
19...	1100	.03	280	6.8	16.0	4	6.4	68	19000	7500	13100

DATE	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
MAY , 1978											
24...	51	0	14	3.9	5.0	1.1	73	0	60	19	5.5
JUN											
19...	120	30	35	7.9	5.8	2.0	110	0	90	15	7.9

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)
MAY , 1978										
24...	90	0	.11	.00	.01	.28	.40	.03	.00	--
JUN										
19...	162	15	--	--	--	--	--	--	--	4

DATE	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)
MAY , 1978										
24...	--	--	--	--	--	--	--	--	--	.00
JUN										
19...	1	10	3	1100	7	390	<.5	0	20	--

SUSQUEHANNA RIVER BASIN

01530278 - GARDNER CREEK AT BIG FLATS NY (LAT 42 07 57 LONG 076 56 15)

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
MAY , 1978											
24...	0900	9.5	230	6.6	12.5	3	8.0	77	--	--	--
JUN											
19...	1000	2.6	465	7.1	13.5	3	5.4	53	5300	3000	4900
JUL											
24...	1000	1.5	560	7.6	13.5	1	6.0	59	--	--	--
AUG											
29...	0900	.67	570	7.0	13.0	0	3.3	32	2300	K114	81
SEP											
26...	0900	2.4	520	7.5	11.0	1	4.4	41	--	--	--

DATE	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
MAY , 1978											
24...	87	26	26	5.3	8.4	1.4	74	0	61	22	13
JUN											
19...	180	50	56	10	16	2.3	160	0	130	19	30
JUL											
24...	220	61	67	12	19	2.8	190	0	160	29	38
AUG											
29...	210	48	65	12	20	3.0	200	0	160	28	37
SEP											
26...	240	72	73	13	20	3.0	200	0	160	30	39

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)
MAY , 1978										
24...	145	1	.72	.00	.01	.42	1.2	.02	.00	--
JUN										
19...	265	6	--	--	--	--	--	--	--	1
JUL										
24...	300	5	.00	.00	.00	.50	.50	.02	.01	--
AUG										
29...	315	9	--	--	--	--	--	--	--	1
SEP										
26...	308	8	3.4	.02	.03	.25	3.7	.02	.00	--

DATE	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)
MAY , 1978										
24...	--	--	--	--	--	--	--	--	--	.00
JUN										
19...	1	20	1	350	7	40	<.5	0	10	--
JUL										
24...	--	--	--	--	--	--	--	--	--	.00
AUG										
29...	2	<10	1	20	4	10	<.5	0	20	--
SEP										
26...	--	--	--	--	--	--	--	--	--	.10

K Results based on colony count outside the acceptable range (non-ideal colony count).

STREAMS TRIBUTARY TO LAKE ONTARIO

04220458 - DYKE CREEK AT ANDOVER NY (LAT 42 09 10 LONG 077 46 56)

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
MAY , 1978											
25...	1200	30	110	6.6	15.0	2	8.4	88	--	--	--
JUN 20...	1100	7.9	130	6.9	20.0	3	8.1	95	K40	K16	70
JUL 27...	1100	12	136	7.1	22.0	5	8.2	99	--	--	--
AUG 30...	1130	2.4	168	8.3	21.0	2	10.2	120	520	K8	26
SEP 27...	1100	2.0	175	8.3	14.0	1	10.1	101	--	--	--

DATE	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
MAY , 1978											
25...	30	9	8.1	2.4	4.5	1.3	26	0	21	13	4.8
JUN 20...	41	1	11	3.3	8.1	1.6	49	0	40	11	5.6
JUL 27...	41	16	11	3.3	9.0	1.8	30	0	25	14	6.4
AUG 30...	51	0	14	4.0	13	1.9	63	0	52	13	8.3
SEP 27...	51	0	14	4.0	13	1.2	63	0	52	14	9.5

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)
MAY , 1978										
25...	65	4	.43	.00	.00	.30	.73	.05	.04	--
JUN 20...	79	8	--	--	--	--	--	--	--	1
JUL 27...	81	10	.50	.00	.00	.40	.90	.02	.01	--
AUG 30...	92	9	--	--	--	--	--	--	--	1
SEP 27...	90	4	.00	.01	.00	.01	.02	.00	.01	--

DATE	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)
MAY , 1978										
25...	--	--	--	--	--	--	--	--	--	.00
JUN 20...	1	<10	1	90	4	10	<.5	0	10	--
JUL 27...	--	--	--	--	--	--	--	--	--	.00
AUG 30...	2	<10	0	20	2	0	<.5	0	0	--
SEP 27...	--	--	--	--	--	--	--	--	--	.00

K Results based on colony count outside the acceptable range (non-ideal colony count).

STREAMS TRIBUTARY TO LAKE ONTARIO

04220462 - EAST VALLEY CREEK AT ANDOVER NY (LAT 42 09 56 LONG 077 47 14)

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
MAY , 1978											
25...	1100	8.9	116	6.6	15.0	2	9.5	94	--	--	--
JUN											
20...	1000	2.3	165	6.7	16.5	3	8.6	93	440	K170	240
JUL											
27...	1000	4.1	195	6.8	20.0	4	7.9	93	--	--	--
AUG											
30...	1000	1.2	235	7.1	18.5	0	8.8	98	490	54	70
SEP											
27...	1000	.98	235	7.5	12.0	1	10.2	98	--	--	--

DATE	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
MAY , 1978											
25...	37	12	11	2.4	5.1	1.2	31	0	25	13	7.4
JUN											
20...	56	17	17	3.3	8.0	1.4	47	0	39	11	10
JUL											
27...	62	16	19	3.6	9.7	1.8	57	0	47	15	12
AUG											
30...	75	15	23	4.2	14	1.7	73	0	60	14	20
SEP											
27...	75	16	23	4.2	12	1.3	72	0	59	16	18

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO. TOTAL (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)
MAY , 1978										
25...	65	5	.05	.00	.00	.20	.25	.07	.05	--
JUN										
20...	92	1	--	--	--	--	--	--	--	2
JUL										
27...	104	5	.23	.00	.00	.50	.73	.02	.01	--
AUG										
30...	111	7	--	--	--	--	--	--	--	1
SEP										
27...	121	0	.05	.00	.01	.00	.05	.00	.00	--

DATE	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)
MAY , 1978										
25...	--	--	--	--	--	--	--	--	--	.00
JUN										
20...	1	10	2	120	6	20	<.5	0	10	--
JUL										
27...	--	--	--	--	--	--	--	--	--	.00
AUG										
30...	2	10	1	50	2	10	<.5	0	20	--
SEP										
27...	--	--	--	--	--	--	--	--	--	.00

K Results based on colony count outside the acceptable range (non-ideal colony count).

STREAMS TRIBUTARY TO LAKE ONTARIO

04220489 - DYKE CREEK NEAR WELLSVILLE NY (LAT 42 07 46 LONG 077 55 03)

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
MAY , 1978 25...	1330	79	132	6.4	15.0	3	7.8	81	--	--	--
JUN 20...	1300	23	165	6.6	19.0	3	8.0	91	K90	K180	23
JUL 27...	1200	28	195	6.5	22.0	21	8.0	96	--	--	--
AUG 30...	1300	7.3	205	6.9	22.0	5	8.0	95	K910	300	71
SEP 27...	1200	7.7	215	6.8	14.0	2	8.4	82	--	--	--

DATE	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
MAY , 1978 25...	43	9	12	3.2	5.2	1.5	42	0	34	13	7.4
JUN 20...	60	18	17	4.3	7.2	1.8	51	0	42	11	9.9
JUL 27...	68	20	19	5.1	8.6	2.0	59	0	48	15	14
AUG 30...	71	9	20	5.0	8.3	1.9	75	0	62	15	10
SEP 27...	73	11	21	5.1	9.1	1.5	76	0	62	16	12

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)
MAY , 1978 25...	78	4	.31	.01	.00	.26	.58	.14	.08	--
JUN 20...	98	31	--	--	--	--	--	--	--	2
JUL 27...	113	36	.44	.00	.06	.56	1.1	.08	.01	--
AUG 30...	108	15	--	--	--	--	--	--	--	1
SEP 27...	108	6	.17	.00	.01	.19	.37	.02	.01	--

DATE	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)
MAY , 1978 25...	--	--	--	--	--	--	--	--	--	.00
JUN 20...	1	10	1	470	5	150	<.5	0	10	--
JUL 27...	--	--	--	--	--	--	--	--	--	.00
AUG 30...	2	<10	1	560	1	120	<.5	0	2	--
SEP 27...	--	--	--	--	--	--	--	--	--	.00

K Results based on colony count outside the acceptable range (non-ideal colony count).

STREAMS TRIBUTARY TO LAKE ONTARIO

04247038 - BELL CREEK WEST OF PENNELLVILLE NY (LAT 43 16 56 LONG 076 18 46)

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
MAY , 1978 16...	1200	4.8	410	6.8	14.0	10	8.6	84	--	--	--
JUN 08...	1200	1.9	480	6.8	19.5	25	4.7	51	21000	3500	1780
JUL 19...	1300	.12	680	7.1	21.5	25	4.0	45	--	--	--
AUG 24...	1300	.38	520	6.8	21.5	9	3.0	34	2700	460	2400
SEP 19...	1200	23	400	6.1	15.0	6	6.7	66	--	--	--

DATE	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
MAY , 1978 16...	140	12	41	10	23	2.2	160	0	130	17	39
JUN 08...	190	37	54	14	20	3.4	190	0	160	25	33
JUL 19...	310	54	84	24	21	3.9	310	0	250	43	40
AUG 24...	210	61	59	15	27	4.0	180	0	150	34	49
SEP 19...	160	110	50	9.3	11	3.6	69	0	57	75	19

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO. TOTAL (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)
MAY , 1978 16...	265	0	.19	.01	.13	.66	.99	.16	.07	--
JUN 08...	300	1	--	--	--	--	--	--	--	4
JUL 19...	439	47	.01	.00	.01	.81	.83	.26	.04	--
AUG 24...	334	3	--	--	--	--	--	--	--	4
SEP 19...	286	13	5.8	.02	.09	2.1	8.0	.40	.28	--

DATE	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)
MAY , 1978 16...	--	--	--	--	--	--	--	--	--	--
JUN 08...	0	<10	6	36000	4	370	<.5	0	20	--
JUL 19...	--	--	--	--	--	--	--	--	--	.00
AUG 24...	3	<10	1	1000	9	190	<.5	0	10	--
SEP 19...	--	--	--	--	--	--	--	--	--	.10

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

Samples are collected at sites other than gaging stations and partial-record stations to give better areal coverage in a river basin. Such sites are referred to as miscellaneous sites.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

HUDSON RIVER BASIN

01335769 - HUDSON RIVER AT WATER PLANT AT WATERFORD NY (LAT 42 47 38 LONG 073 40 30)

DATE	TIME	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)
NOV , 1977					
19...	0930	<100	10	0	<.5
19...	1625	0	<10	0	<.5
20...	1050	0	<10	0	<.5
20...	1855	0	<10	0	<.5

01359915 - HANNACROIS CREEK AT DORMANSVILLE NY (LAT 42 29 49 LONG 073 58 46)

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	COLIFORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	SOLIDS, VOLATILE IN BOTTOM MATERIAL (MG/KG)
APR , 1978											
25...	1030	E20	82	5.6	9.0	12.4	109	K48	36	K15	--
JUN											
21...	0750	E20	95	7.0	16.0	9.9	102	270	K190	200	15400
AUG											
02...	1100	E5.0	147	6.2	18.0	9.9	106	600	K250	K110	--

01359915 - HANNACROIS CREEK AT DORMANSVILLE NY (LAT 42 29 49 LONG 073 58 46)

DATE	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/L AS HG)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)
APR , 1978										
25...	--	--	--	--	--	--	--	--	--	--
JUN										
21...	0	10	10	10	15000	10	.0	0	.0	0
AUG										
02...	--	--	--	--	--	--	--	--	--	--

01359915 - HANNACROIS CREEK AT DORMANSVILLE NY (LAT 42 29 49 LONG 073 58 46)

DATE	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)
APR , 1978										
25...	--	--	--	--	--	--	--	--	--	--
JUN										
21...	.0	.3	.1	.0	.0	.0	.0	.0	.0	.0
AUG										
02...	--	--	--	--	--	--	--	--	--	--

E Estimated.

K Results based on colony count outside the acceptable range (non-ideal colony count).

DATE	MALA-THION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	METH-OXY-CHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARA-THION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRI-THION, TOT. IN BOTTOM MATL. (UG/KG)	PARA-THION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	TOXA-PHENE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	TRI-THION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	2,4-D, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	2,4,5-T TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	SILVEX, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
01359915 - HANNACROIS CREEK AT DORMANSVILLE NY (LAT 42 29 49 LONG 073 58 46)										
APR , 1978										
25...	--	--	--	--	--	--	--	--	--	--
JUN										
21...	.0	.0	.0	.0	.0	0	.0	0	0	.0
AUG										
02...	--	--	--	--	--	--	--	--	--	--

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
01359918 - SILVER CREEK AT DORMANSVILLE NY (LAT 42 29 17 LONG 073 58 56)										
APR , 1978										
25...	1130	E2.5	130	6.2	10.0	8.8	78	K30	K3	<1
JUN										
21...	0900	1.6	160	6.8	17.5	7.2	76	3300	K190	190
AUG										
02...	1200	.90	190	6.2	18.0	7.4	78	900	110	K92

DATE	SOLIDS, VOLA-TILE IN BOTTOM MA-TERIAL (MG/KG)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS)	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD)	CHRO-MIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	IRON, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS FE)	LEAD, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS PB)	MERCURY RECOV. FM BOT-TOM MA-TERIAL (UG/L AS HG)	PCB, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ALDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	CHLOR-DANE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
01359918 - SILVER CREEK AT DORMANSVILLE NY (LAT 42 29 17 LONG 073 58 56)										
APR , 1978										
25...	--	--	--	--	--	--	--	--	--	--
JUN										
21...	47500	0	10	10	13000	10	.0	5	.0	0
AUG										
02...	--	--	--	--	--	--	--	--	--	--

DATE	DDD, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDT, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DI-AZINON, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DI-ELDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ENDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ETHION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	HEPTA-CHLOR, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	HEPTA-CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
01359918 - SILVER CREEK AT DORMANSVILLE NY (LAT 42 29 17 LONG 073 58 56)										
APR , 1978										
25...	--	--	--	--	--	--	--	--	--	--
JUN										
21...	.7	.4	.0	.0	.0	.0	.0	.0	.0	.0
AUG										
02...	--	--	--	--	--	--	--	--	--	--

E Estimated.

K Results based on colony count outside the acceptable range (non-ideal colony count).

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

HUDSON RIVER BASIN--Continued

01359918 - SILVER CREEK AT DORMANSVILLE NY (LAT 42 29 17 LONG 073 58 56)

DATE	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	2,4-D, TOTAL IN BOTTOM MATERIAL (UG/KG)	2,4,5-T TOTAL IN BOTTOM MATERIAL (UG/KG)	SILVEX, TOTAL IN BOTTOM MATERIAL (UG/KG)
APR , 1978 25...	--	--	--	--	--	--	--	--	--	--
JUN 21...	.0	.0	.0	.0	.0	0	.0	0	0	.0
AUG 02...	--	--	--	--	--	--	--	--	--	--

01361750 - BASIC CREEK BELOW SOUTH WESTERLO NY (LAT 42 26 50 LONG 074 01 37)

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	COLIFORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	SOLIDS, VOLATILE IN BOTTOM MATERIAL (MG/KG)
APR , 1978 25...	1330	E16	110	6.5	10.0	11.9	100	<1	<1	K5	--
JUN 21...	1400	20	153	7.8	22.0	9.2	106	1300	K120	K70	22400
AUG 02...	1330	E2.0	200	8.2	20.0	12.4	135	K2400	57	125	--

01361750 - BASIC CREEK BELOW SOUTH WESTERLO NY (LAT 42 26 50 LONG 074 01 37)

DATE	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/L AS HG)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)
APR , 1978 25...	--	--	--	--	--	--	--	--	--	--	--
JUN 21...	0	10	10	8500	280	.0	0	.0	8	.3	1.7
AUG 02...	--	--	--	--	--	--	--	--	--	--	--

01361750 - BASIC CREEK BELOW SOUTH WESTERLO NY (LAT 42 26 50 LONG 074 01 37)

DATE	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)	2,4-D, TOTAL IN BOTTOM MATERIAL (UG/KG)	2,4,5-T TOTAL IN BOTTOM MATERIAL (UG/KG)	SILVEX, TOTAL IN BOTTOM MATERIAL (UG/KG)
APR , 1978 25...	--	--	--	--	--	--	--	--	--	--
JUN 21...	5.3	.0	.0	.0	.0	.0	0	0	0	.0
AUG 02...	--	--	--	--	--	--	--	--	--	--

E Estimated.

K Results based on colony count outside the acceptable range (non-ideal colony count).

CHEMICAL QUALITY OF PRECIPITATION

HUDSON RIVER BASIN

AT ROCK HILL, NY

LOCATION.--Lat 41°37'25", long 74°31'17", Sullivan County, on North Shore Road, just north of Wanaksink Lake, 0.9 mi (1.4 km) east of Rock Hill, 3.5 mi (5.6 km) northwest of National Weather Service station "Rock Hill 3SW," and 6.5 mi (10.5 km) southeast of Monticello.

PERIOD OF RECORD.--Water years 1966 to current year (monthly composite).

EQUIPMENT.--The sample collector is a straight-sided polyethylene funnel approximately 6.5 in. (165 mm) in diameter which drains into a Teflon* receiving bottle. A looped plastic tubing connects the funnel with the receiving bottle to retard evaporation. The polyethylene funnel is heated during the cold-weather season to aid complete collection of snow. The receiving bottle is enclosed in an insulated box. The opening for the collector is approximately 5 ft (1.5 m) above ground level and is protected by a windshield.

REMARKS.--Inches of precipitation is that for the National Weather Service station for the reported period of sampling.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

PERIOD OF COLLECTION	INCHES OF PRECIPITATION	CALCIUM (CA) (MG/L)	MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)
77/09/30 TO 77/10/30	5.24	.42	.11	.50	.08	--	2.80	.67
77/10/30 TO 77/11/30	E 5.40	.39	.09	.40	.02	--	1.40	.58
77/11/30 TO 78/01/04	E 6.00	.28	.05	.20	.02	--	1.90	.31
78/01/04 TO 78/01/31	7.70	.34	.06	.45	.02	--	1.00	.34
78/01/31 TO 78/03/01	1.43	.72	.16	.70	.04	--	1.40	.22
78/03/01 TO 78/04/01	3.42	.20	.07	.45	.03	--	2.20	.73
78/04/01 TO 78/04/30	1.57	1.90	.30	.25	.05	--	5.20	.32
78/04/30 TO 78/05/31	7.74	.67	.15	.40	.26	--	3.50	.60
78/05/31 TO 78/07/01	3.68	.40	.09	.12	.08	--	5.30	.22
78/07/01 TO 78/08/01	E 2.50	6.00	.48	.30	.11	--	7.60	.66
78/08/01 TO 78/09/01	E 3.40	.08	.05	.10	.05	--	2.40	.15
78/09/01 TO 78/10/01	E 4.20	.21	.04	.13	.08	--	6.40	.26

PERIOD OF COLLECTION	FLUORIDE (F) (MG/L)	NITRITE+ NITRATE AS N (MG/L)	AMMONIA AS N (MG/L)	PHOSPHORUS (P) (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	ACIDITY AS H (MG/L)	LEAD (PB) (UG/L)
77/09/30 TO 77/10/30	.0	.448	.250	.012	32	4.10	.122	0
77/10/30 TO 77/11/30	.0	.321	.082	.005	22	3.60	.143	140
77/11/30 TO 78/01/04	.0	.271	.040	.002	23	3.90	.133	27
78/01/04 TO 78/01/31	.0	.199	.019	.003	14	4.40	.076	15
78/01/31 TO 78/03/01	.0	.333	.003	.002	10	5.20	.042	--
78/03/01 TO 78/04/01	.0	.318	.163	.003	24	4.30	.102	82
78/04/01 TO 78/04/30	.0	.809	.402	.012	33	4.40	.095	30
78/04/30 TO 78/05/31	.0	.366	.097	.011	27	4.40	.120	50
78/05/31 TO 78/07/01	.0	.565	.337	.012	50	4.00	.136	69
78/07/01 TO 78/08/01	.1	1.500	.478	.059	45	4.10	.118	58
78/08/01 TO 78/09/01	.0	.232	.220	.008	23	4.05	.090	120
78/09/01 TO 78/10/01	.0	.741	.424	.004	66	3.70	.193	62

* The use of the brand name in this report is for identification purposes only and does not imply endorsement by the U.S. Geological Survey.

E Estimated.

CHEMICAL QUALITY OF PRECIPITATION

HUDSON RIVER BASIN

NEAR ALBANY, NY

LOCATION.--Lat 42°44'35", long 73°48'30", Albany County, at National Weather Service station "Albany WSO AP," at Albany County Airport, 0.5 mi (0.8 km) north of State Highway 155.

PERIOD OF RECORD.--Water years 1966 to current year (monthly composite).

EQUIPMENT.--The sample collector is a straight-sided polyethylene funnel approximately 6.5 in. (165 mm) in diameter which drains into a Teflon receiving bottle. A looped plastic tubing connects the funnel with the receiving bottle to retard evaporation. The polyethylene funnel is heated during the cold-weather season to aid in complete collection of snow. The receiving bottle is enclosed in an insulated box. The opening for the collector is approximately 5 ft (1.5 m) above ground level and is protected by a windshield.

REMARKS.--Inches of precipitation is that for the National Weather Service station for the reported period of sampling.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

PERIOD OF COLLECTION	INCHES OF PRECIPITATION	CALCIUM (CA) (MG/L)	MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)
77/09/27 TO 77/11/01	4.04	.99	.12	.12	.07	--	1.40	.30
77/11/01 TO 77/11/29	4.47	1.10	.19	.30	.03	--	2.30	.30
77/11/29 TO 78/01/10	6.85	.56	.10	.30	.01	--	3.40	.67
78/01/10 TO 78/02/02	4.18	.33	.08	.47	.01	--	2.00	.46
78/03/01 TO 78/03/30	1.99	----	---	---	---	--	1.60	.71
78/03/30 TO 78/05/01	1.68	----	---	---	---	--	----	---
78/05/01 TO 78/05/31	1.85	1.10	.21	.20	.08	0	2.70	.25
78/05/31 TO 78/07/03	E 4.70	1.10	.18	.15	.12	--	7.60	.19
78/07/03 TO 78/08/03	E 4.10	1.40	.23	.10	.10	--	6.60	.25
78/08/03 TO 78/09/07	E 3.10	2.10	.25	.06	.07	--	4.90	.11
78/09/07 TO 78/09/30	1.80	1.80	.20	.20	.10	--	8.70	.69

PERIOD OF COLLECTION	FLUORIDE (F) (MG/L)	NITRITE+NITRATE AS N (MG/L)	AMMONIA AS N (MG/L)	PHOSPHORUS (P) (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	ACIDITY AS H (MG/L)	LEAD (PB) (UG/L)
77/09/27 TO 77/11/01	.0	.377	.160	.003	16	4.30	.086	160
77/11/01 TO 77/11/29	.0	.444	.104	.002	23	4.10	.113	40
77/11/29 TO 78/01/10	.0	.440	.114	.004	31	4.20	.111	24
78/01/10 TO 78/02/02	.0	.335	.057	.003	20	4.00	.109	11
78/03/01 TO 78/03/30	.0	.489	.041	.002	15	5.20	.049	100
78/03/30 TO 78/05/01	--	.827	.101	.021	18	5.50	.034	50
78/05/01 TO 78/05/31	.0	.411	.217	.021	14	5.70	.029	10
78/05/31 TO 78/07/03	.0	.926	1.000	.062	58	4.10	.143	67
78/07/03 TO 78/08/03	.0	.194	.054	.019	47	4.30	.102	82
78/08/03 TO 78/09/07	.0	.723	.373	.038	40	4.00	.116	130
78/09/07 TO 78/09/30	.0	.946	.625	.046	77	3.70	.205	100

E Estimated.

CHEMICAL QUALITY OF PRECIPITATION

HUDSON RIVER BASIN

AT HINCKLEY, NY

LOCATION.--Lat 43°18'35", long 75°06'35", Oneida County, at National Weather Service station "Hinckley," at Hinckley Dam on West Canada Creek, on Cody Road in Hinckley.

PERIOD OF RECORD.--Water years 1966 to current year (monthly composite).

EQUIPMENT.--The sample collector is a straight-sided polyethylene funnel approximately 6.5 in. (165 mm) in diameter which drains into a Teflon receiving bottle. A looped plastic tubing connects the funnel with the receiving bottle to retard evaporation. The polyethylene funnel is heated during the cold-weather season to aid in complete collection of snow. The receiving bottle is enclosed in an insulated box. The opening for the collector is approximately 5 ft (1.5 m) above ground level and is protected by a windshield.

REMARKS.--Inches of precipitation is that for the National Weather Service station for the reported period of sampling.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

PERIOD OF COLLECTION	INCHES OF PRECIPITATION	CALCIUM (CA) (MG/L)	MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)
77/10/03 TO 77/10/27	E 4.10	1.10	.12	.20	.03	--	3.40	.32
77/10/27 TO 77/11/17	E 3.80	.41	.06	.17	.01	--	3.30	.28
77/11/17 TO 77/12/20	E 6.70	.31	.04	.12	.01	--	2.80	.21
77/12/20 TO 78/01/17	2.51	.38	.06	.70	.01	--	2.10	.40
78/01/17 TO 78/03/02	3.73	.51	.11	.26	.01	--	1.40	.36
78/03/02 TO 78/04/01	E 3.50	.72	.12	.50	.05	--	3.80	.23
78/04/01 TO 78/05/01	E 1.90	1.80	.31	.20	.04	--	6.20	.16
78/05/01 TO 78/05/31	3.31	1.50	.25	.08	.03	--	3.80	.09
78/05/31 TO 78/06/22	E 3.40	.86	.21	.10	.06	--	7.60	.25
78/06/22 TO 78/08/01	E 5.20	.66	.12	.10	.04	--	9.20	.19
78/08/01 TO 78/08/31	E 3.40	.53	.08	.05	.03	--	7.50	.25
78/08/31 TO 78/09/27	6.37	.33	.06	.10	.07	--	8.90	.20

PERIOD OF COLLECTION	FLUORIDE (F) (MG/L)	NITRITE+ NITRATE AS N (MG/L)	AMMONIA AS N (MG/L)	PHOSPHORUS (P) (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	ACIDITY AS H (MG/L)	LEAD (PB) (UG/L)
77/10/03 TO 77/10/27	.0	.502	.110	.008	27	4.00	.131	250
77/10/27 TO 77/11/17	.0	.317	.035	.003	22	3.80	.118	200
77/11/17 TO 77/12/20	.0	.461	.104	.001	27	3.80	.151	37
77/12/20 TO 78/01/17	.0	.522	.100	.002	26	4.20	.099	6
78/01/17 TO 78/03/02	.0	.801	.057	.002	20	4.30	.092	9
78/03/02 TO 78/04/01	.0	1.100	.606	.000	41	4.20	.119	74
78/04/01 TO 78/05/01	.0	1.100	.796	.003	46	4.20	.112	53
78/05/01 TO 78/05/31	.0	.809	.207	.000	28	4.10	.078	71
78/05/31 TO 78/06/22	.0	.750	.561	.002	61	4.00	.145	88
78/06/22 TO 78/08/01	.0	.778	.614	.002	73	3.85	.198	120
78/08/01 TO 78/08/31	.0	.607	.591	.005	85	3.60	.232	50
78/08/31 TO 78/09/27	.0	.759	.511	.026	70	3.65	.225	85

E Estimated.

CHEMICAL QUALITY OF PRECIPITATION

SUSQUEHANNA RIVER BASIN

NEAR ATHENS, PA

LOCATION.--Lat 41°55'31", long 76°31'35", Bradford County, at National Weather Service station "Milan 1N," 300 feet west of U.S. Highways 220 and 309, 0.6 mi (1.0 km) west of the mouth of the Chemung River, 2.0 mi (3.2 km) south of Athens, and 5.1 mi (8.2 km) south of the New York-Pennsylvania State line.

PERIOD OF RECORD.--Water years 1966 to current year (monthly composite).

EQUIPMENT.--The sample collector is a straight-sided polyethylene funnel approximately 6.5 in. (165 mm) in diameter which drains into a Teflon receiving bottle. A looped plastic tubing connects the funnel with the receiving bottle to retard evaporation. The polyehtylene funnel is heated during the cold-weather season to aid in complete collection of snow. The receiving bottle is enclosed in an insulated box. The opening for the collector is approximately 5 ft (1.5 m) above ground level and is protected by a windshield.

REMARKS.--Inches of precipitation is that for the National Weather Service station for the reported period of sampling.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

PERIOD OF COLLECTION	INCHES OF PRECIPI- TATION	CAL- CIUM (CA) (MG/L)	MAGNE- SIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO- RIDE (CL) (MG/L)
77/10/03 TO 77/10/31	E 3.70	.51	.07	.06	.04	--	2.90	.36
77/10/31 TO 77/12/01	E 6.70	.57	.10	.40	.06	--	2.50	.53
77/12/01 TO 78/01/01	E 3.20	.25	.04	.30	.02	--	2.30	.33
78/01/01 TO 78/03/02	E 4.80	.27	.05	.28	.01	--	1.30	.30
78/03/02 TO 78/04/06	E 4.20	.35	.13	.39	.05	--	4.50	.60
78/04/06 TO 78/05/02	E 1.20	----	---	---	---	--	----	---
78/05/02 TO 78/05/30	E 3.70	1.10	.24	.20	.07	--	4.30	.42
78/05/30 TO 78/07/05	E 3.75	.59	.13	.15	.14	--	7.40	.37
78/07/05 TO 78/08/02	E 4.20	.43	.08	.08	.06	--	7.80	.30
78/08/02 TO 78/09/01	E 6.40	.25	.04	.05	.06	--	3.30	.23
78/09/01 TO 78/10/01	E 1.40	.68	.11	.23	.15	--	7.80	.40

PERIOD OF COLLECTION	FLUO- RIDE (F) (MG/L)	NIT- RITE+ NIT- RATE AS N (MG/L)	AMMONIA AS N (MG/L)	PHOS- PHORUS (P) (MG/L)	SPE- CIFIC CON- DUCTANCE (MICRO- (MHOS)	PH (UNITS)	ACIDITY AS H (MG/L)	LEAD (PB) (UG/L)
77/10/03 TO 77/10/31	.0	.572	.554	.010	26	3.90	.137	85
77/10/31 TO 77/12/01	.0	.633	1.200	.017	30	4.10	.116	82
77/12/01 TO 78/01/01	.0	.417	.728	.022	21	4.50	.080	1
78/01/01 TO 78/03/02	.0	.446	.524	.009	17	4.50	.066	2
78/03/02 TO 78/04/06	.0	1.300	2.500	.019	34	4.70	.087	31
78/04/06 TO 78/05/02	--	1.500	2.800	.051	39	5.10	.066	90
78/05/02 TO 78/05/30	.0	.691	1.400	.032	24	4.90	.055	38
78/05/30 TO 78/07/05	.0	.713	1.100	.067	51	4.15	.115	78
78/07/05 TO 78/08/02	.0	3.000	.746	.024	68	3.95	.155	120
78/08/02 TO 78/09/01	.0	.411	.449	.007	35	3.90	.142	85
78/09/01 TO 78/10/01	.0	1.000	2.000	.010	66	3.80	.174	54

E Estimated.

ALLEGHENY RIVER BASIN

AT ALLEGANY STATE PARK, NY

LOCATION.--Lat 42°06'00", long 78°45'00", Cattaraugus County, at National Weather Service station "Allegany State Park," 100 feet west of Park Administration Building, 300 feet west of Park Highway 1, and 6.0 mi (9.7 km) south of Salamanca.

PERIOD OF RECORD.--Water years 1966 to current year (monthly composite).

EQUIPMENT.--The sample collector is a straight-sided polyethylene funnel approximately 6.5 in. (165 mm) in diameter which drains into a Teflon receiving bottle. A looped plastic tubing connects the funnel with the receiving bottle to retard evaporation. The polyethylene funnel is heated during the cold-weather season to aid in complete collection of snow. The receiving bottle is enclosed in an insulated box. The opening for the collector is approximately 5 ft (1.5 m) above ground level and is protected by a windshield.

REMARKS.--Inches of precipitation is that for the National Weather Service station for the reported period of sampling.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

PERIOD OF COLLECTION	INCHES OF PRECIPITATION	CALCIUM (CA) (MG/L)	MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)
77/10/01 TO 77/11/01	3.20	1.40	.12	.20	.05	--	4.10	.46
77/11/01 TO 77/12/01	4.80	.51	.07	.15	.09	--	2.70	.23
77/12/01 TO 78/01/03	5.30	.35	.05	.15	.02	--	1.90	.59
78/01/03 TO 78/03/02	4.10	.43	.06	.32	.01	--	.90	.08
78/03/02 TO 78/04/01	1.70	.69	.13	.30	.05	--	6.20	.46
78/04/01 TO 78/05/02	2.70	----	---	---	---	--	----	---
78/05/02 TO 78/06/01	3.90	.84	.16	.10	.07	--	3.30	.29
78/06/01 TO 78/07/03	2.59	1.10	.27	.10	.41	--	8.30	.13
78/07/03 TO 78/08/01	3.59	1.30	.23	.13	.11	--	10.00	.17
78/08/01 TO 78/09/01	2.08	1.40	.24	.13	.09	--	11.00	.18
78/09/01 TO 78/10/02	3.74	----	---	---	---	--	----	---

PERIOD OF COLLECTION	FLUORIDE (F) (MG/L)	NITRITE+NITRATE AS N (MG/L)	AMMONIA AS N (MG/L)	PHOSPHORUS (P) (MG/L)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	ACIDITY AS H (MG/L)	LEAD (PB) (UG/L)
77/10/01 TO 77/11/01	.0	.866	.263	.005	44	3.70	.174	120
77/11/01 TO 77/12/01	.0	.298	.092	.007	22	3.90	.136	73
77/12/01 TO 78/01/03	.0	.331	.028	.002	24	3.90	.148	57
78/01/03 TO 78/03/02	.0	.458	.034	.001	20	4.40	.079	19
78/03/02 TO 78/04/01	.0	1.400	.811	.001	69	3.90	.191	98
78/04/01 TO 78/05/02	--	.655	.582	.008	31	4.50	.074	54
78/05/02 TO 78/06/01	.0	.482	.283	.000	21	4.60	.060	120
78/06/01 TO 78/07/03	.0	.630	.825	.054	50	4.30	.092	78
78/07/03 TO 78/08/01	.0	.694	.737	.047	67	3.95	.155	160
78/08/01 TO 78/09/01	.0	.696	.102	.009	101	3.55	.274	260
78/09/01 TO 78/10/02	--	.473	.102	.012	84	3.65	.221	140

CHEMICAL QUALITY OF PRECIPITATION

LAKE ONTARIO BASIN

AT MAYS POINT, NY

LOCATION.--Lat 42°59'55", long 76°45'45", Wayne County, at National Weather Service station "Mays Point Lock 25," at Erie (Barge) Canal and State Highway 89, and 6.2 mi (10.0 km) south of Savannah.

PERIOD OF RECORD.--Water years 1966 to current year (monthly composite).

EQUIPMENT.--The sample collector is a straight-sided polyethylene funnel approximately 6.5 in. (165 mm) in diameter which drains into a Teflon receiving bottle. A looped plastic tubing connects the funnel with the receiving bottle to retard evaporation. The polyethylene funnel is heated during the cold-weather season to aid in complete collection of snow. The receiving bottle is enclosed in an insulated box. The opening for the collector is approximately 5 ft (1.5 m) above ground level and is protected by a windshield.

REMARKS.--Inches of precipitation is that for the National Weather Service station for the reported period of sampling.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

PERIOD OF COLLECTION	INCHES OF PRECIPITATION	CALCIUM (CA) (MG/L)	MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)
77/10/01 TO 77/10/31	E 4.50	.37	.06	.20	.02	--	1.90	.30
77/11/01 TO 77/11/30	3.95	.51	.09	.20	.03	--	1.10	.17
77/12/01 TO 77/12/31	4.05	.58	.08	.88	.07	--	2.60	.31
77/12/31 TO 78/03/01	E 5.50	.69	.11	.60	.01	--	2.00	.84
78/03/01 TO 78/03/31	E 1.40	.74	.20	.65	.06	--	4.10	.64
78/03/31 TO 78/05/01	1.70	2.20	.37	.20	.06	--	6.00	.27
78/05/01 TO 78/06/01	2.15	1.30	.28	.10	.13	--	5.50	.54
78/06/01 TO 78/06/30	2.43	2.00	.50	.15	.20	--	9.60	.48
78/06/30 TO 78/08/01	1.48	2.40	.56	.15	.12	--	12.00	.55
78/08/01 TO 78/09/01	1.29	1.80	.40	.13	.13	--	10.00	.46
78/09/01 TO 78/09/30	3.30	1.00	.20	.02	.00	--	4.20	.12

PERIOD OF COLLECTION	FLUORIDE (F) (MG/L)	NITRITE+NITRATE AS N (MG/L)	AMMONIA AS N (MG/L)	PHOSPHORUS (P) (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	ACIDITY AS H (MG/L)	LEAD (PB) (UG/L)
77/10/01 TO 77/10/31	.0	.363	.053	.001	27	3.90	.119	32
77/11/01 TO 77/11/30	.0	.385	.142	.004	26	3.90	.165	26
77/12/01 TO 77/12/31	.0	.494	.235	.007	28	3.80	.133	49
77/12/31 TO 78/03/01	.0	.644	.040	.003	23	4.50	.077	2
78/03/01 TO 78/03/31	.0	.836	.391	.002	43	4.20	.132	92
78/03/31 TO 78/05/01	.0	1.000	.684	.000	38	4.40	.088	29
78/05/01 TO 78/06/01	.0	.873	.776	.038	27	5.10	.050	40
78/06/01 TO 78/06/30	.0	.861	1.200	.098	44	4.60	.083	57
78/06/30 TO 78/08/01	.0	.926	.886	.080	63	4.05	.141	83
78/08/01 TO 78/09/01	.1	.804	.693	.052	68	3.80	.184	93
78/09/01 TO 78/09/30	.0	.554	.381	.010	46	3.80	.142	62

E Estimated.

CHEMICAL QUALITY OF PRECIPITATION

LAKE ONTARIO BASIN

AT PAVILION, NY

LOCATION.--Lat 42°52'35", long 78°01'37", Genesee County, at National Weather Service station "Pavilion", 300 ft (91 m) east of Town of Pavilion garage, and 0.2 mi (0.3 km) west of the intersection of State Highways 63 and 19.

PERIOD OF RECORD.--October 1977 to September 1978 (monthly composite).

EQUIPMENT.--The sample collector is a straight-sided polyethylene funnel approximately 6.5 in. (165 mm) in diameter which drains into a Teflon receiving bottle. A looped plastic tubing connects the funnel with the receiving bottle to retard evaporation. The polyethylene funnel is heated during the cold-weather season to aid in complete collection of snow. The receiving bottle is enclosed in an insulated box. The opening for the collector is approximately 5 ft (1.5 m) above ground level and is protected by a windshield.

REMARKS.--Inches of precipitation is that for the National Weather Service station for the reported period of sampling.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

PERIOD OF COLLECTION	INCHES OF PRECIPI-TATION	CAL-CIUM (CA) (MG/L)	MAGNE-SIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)
77/10/27 TO 77/12/01	2.40	2.20	.94	.22	.76	1	3.30	1.00
77/12/01 TO 78/01/01	4.70	.67	.17	.20	.02	--	2.10	.17
78/01/01 TO 78/03/01	3.90	.91	.19	.75	.05	--	2.10	.29
78/03/01 TO 78/05/01	3.60	4.10	.48	.60	.07	7	5.30	.84
78/05/01 TO 78/06/01	2.70	5.10	.43	.25	.08	21	5.10	.51
78/06/01 TO 78/07/01	E 2.50	6.10	.46	.44	.90	8	7.70	.83
78/07/01 TO 78/08/01	E 2.20	.29	.05	.10	.04	1	3.60	.12
78/08/01 TO 78/09/01	2.86	4.80	.49	.15	.15	11	7.10	.49
78/09/01 TO 78/09/20	E 5.20	3.00	.43	.08	.08	--	5.30	.15

PERIOD OF COLLECTION	FLUO-RIDE (F) (MG/L)	NIT-RITE+ NIT-RATE AS N (MG/L)	AMMONIA AS N (MG/L)	PHOS-PHORUS (P) (MG/L)	SPE-CIFIC CON-DUCTANCE (MICRO-(MHOS)	PH (UNITS)	ACIDITY AS H (MG/L)	LEAD (PB) (UG/L)
77/10/27 TO 77/12/01	.0	.292	.378	.455	27	5.80	.088	43
77/12/01 TO 78/01/01	.0	.422	.236	.012	17	4.20	.093	21
78/01/01 TO 78/03/01	.0	.661	.203	.007	20	4.40	.081	19
78/03/01 TO 78/05/01	.1	1.300	.531	.000	33	6.60	.031	34
78/05/01 TO 78/06/01	.1	.718	.541	.021	33	7.00	.034	40
78/06/01 TO 78/07/01	.1	1.700	.011	.133	50	6.70	.028	81
78/07/01 TO 78/08/01	.0	.448	.250	.001	48	6.80	.032	100
78/08/01 TO 78/09/01	.1	.821	.271	.032	35	6.00	.044	43
78/09/01 TO 78/09/20	.0	.661	.347	.010	26	5.10	.103	100

E Estimated.

CHEMICAL QUALITY OF PRECIPITATION

LAKE ONTARIO BASIN

AT STILLWATER RESERVOIR, NY

LOCATION.--Lat 43°53'28", long 75°02'10", Herkimer County, at National Weather Service station "Stillwater Reservoir", 0.3 mi (0.5 km) northwest of New York State Department of Environmental Conservation forest ranger's cabin, 0.8 mi (1.3 km) southeast of Stillwater Reservoir dam, and 6.8 mi (10.9 km) west of Beaver River.

PERIOD OF RECORD.--October 1977 to September 1978 (monthly composite).

EQUIPMENT.--The sample collector is a straight-sided polyethylene funnel approximately 6.5 in. (165 mm) in diameter which drains into a Teflon receiving bottle. A looped plastic tubing connects the funnel with the receiving bottle to retard evaporation. The polyethylene funnel is heated during the cold-weather season to aid in complete collection of snow. The receiving bottle is enclosed in an insulated box. The opening for the collector is approximately 5 ft (1.5 m) above ground level and is protected by a windshield.

REMARKS.--Inches of precipitation is that for the National Weather Service station for the reported period of sampling.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

PERIOD OF COLLECTION	INCHES OF PRECIPI- TATION	CAL- CIUM (CA) (MG/L)	MAGNE- SIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO- RIDE (CL) (MG/L)
77/10/31 TO 77/11/24	E 4.60	.60	.07	.18	.03	--	2.30	.22
77/11/24 TO 77/12/30	6.50	.26	.04	.08	.01	--	2.70	.17
77/12/30 TO 78/03/03	6.02	.31	.05	.28	.01	--	1.60	.23
78/03/03 TO 78/03/31	3.92	.16	.02	.07	.02	--	1.80	.14
78/03/31 TO 78/05/21	5.97	.65	.07	.15	.04	--	5.30	.22
78/05/21 TO 78/06/20	E 7.20	.29	.05	.13	.04	--	----	---
78/06/20 TO 78/08/31	E 7.00	1.20	.12	.10	.20	--	7.40	.16
78/08/31 TO 78/10/01	5.04	.44	.06	.14	.05	--	7.40	.10

PERIOD OF COLLECTION	FLUO- RIDE (F) (MG/L)	NIT- RITE+ NIT- RATE AS N (MG/L)	AMMONIA AS N (MG/L)	PHOS- PHORUS (P) (MG/L)	SPE- CIFIC CON- DUCTANCE (MICRO- (MHOS)	PH (UNITS)	ACIDITY AS H (MG/L)	LEAD (PB) (UG/L)
77/10/31 TO 77/11/24	.0	.362	.133	.005	18	4.20	.106	22
77/11/24 TO 77/12/30	.0	.459	.099	.005	24	4.00	.152	22
77/12/30 TO 78/03/03	.0	.613	.100	.000	20	4.40	.100	4
78/03/03 TO 78/03/31	.0	.543	.246	.000	24	4.20	.125	46
78/03/31 TO 78/05/21	.0	.964	.612	.000	43	4.10	.141	120
78/05/21 TO 78/06/20	--	1.300	.370	.001	31	4.20	.096	74
78/06/20 TO 78/08/31	.0	.688	.693	.016	57	3.80	.164	43
78/08/31 TO 78/10/01	.0	.670	.568	.007	66	3.70	.189	52

E Estimated.

CHEMICAL QUALITY OF PRECIPITATION

ST. LAWRENCE RIVER BASIN

NEAR CANTON, NY

LOCATION.--Lat 44°34'40", long 75°06'40", St. Lawrence County, at National Weather Service station "Canton 4SE," on the Canton State University Farm on State Highway 68, 2.5 mi (4.0 km) southeast of U.S. Highway 11 and Canton.

PERIOD OF RECORD.--Water years 1966 to current year (monthly composite).

EQUIPMENT.--The sample collector is a straight-sided polyethylene funnel approximately 6.5 in. (165 mm) in diameter which drains into a Teflon receiving bottle. A looped plastic tubing connects the funnel with the receiving bottle to retard evaporation. The polyethylene funnel is heated during the cold-weather season to aid in complete collection of snow. The receiving bottle is enclosed in an insulated box. The opening for the collector is approximately 5 ft (1.5 m) above ground level and is protected by a windshield.

REMARKS.--Inches of precipitation is that for the National Weather Service station for the reported period of sampling.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

PERIOD OF COLLECTION	INCHES OF PRECIPITATION	CALCIUM (CA) (MG/L)	MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)
77/10/03 TO 77/11/01	3.12	1.90	.21	.20	.07	--	3.40	.41
77/11/01 TO 77/12/01	3.81	.96	.32	.15	.03	--	2.60	.31
77/12/01 TO 78/01/03	3.71	.55	.19	.20	.02	--	2.10	.17
78/01/03 TO 78/03/01	4.82	.41	.17	.36	.01	--	.90	.22
78/03/01 TO 78/03/31	2.70	.69	.55	.50	.03	--	3.00	.62
78/03/31 TO 78/05/01	2.47	1.90	.75	.17	.03	--	5.80	.24
78/05/01 TO 78/06/01	E 1.90	1.50	.52	.20	.15	0	4.20	.40
78/06/01 TO 78/07/05	E 3.00	2.50	.63	.80	.45	--	5.90	.19
78/07/05 TO 78/08/02	1.76	2.10	.78	.20	.27	--	8.70	.29
78/08/02 TO 78/09/01	5.08	1.20	.37	.10	.09	--	5.30	.18
78/09/01 TO 78/10/02	E 2.50	1.50	.47	.13	.13	--	5.80	.29

PERIOD OF COLLECTION	FLUORIDE (F) (MG/L)	NITRITE+NITRATE AS N (MG/L)	AMMONIA AS N (MG/L)	PHOSPHORUS (P) (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	ACIDITY AS H (MG/L)	LEAD (PB) (UG/L)
77/10/03 TO 77/11/01	.0	.540	.175	.011	23	4.30	.089	220
77/11/01 TO 77/12/01	.0	.399	.102	.012	19	4.20	.094	210
77/12/01 TO 78/01/03	.0	.449	.081	.008	24	3.90	.143	44
78/01/03 TO 78/03/01	.0	.318	.053	.001	11	4.20	.073	7
78/03/01 TO 78/03/31	.0	.699	.318	.002	20	5.20	.057	140
78/03/31 TO 78/05/01	.0	.873	.755	.005	32	4.60	.071	120
78/05/01 TO 78/06/01	.0	.482	.424	.030	19	6.30	.032	36
78/06/01 TO 78/07/05	.0	.694	.413	.045	28	4.80	.052	80
78/07/05 TO 78/08/02	.0	1.100	.877	.098	39	5.20	.050	110
78/08/02 TO 78/09/01	.0	.536	.364	.016	40	3.90	.109	65
78/09/01 TO 78/10/02	.0	.670	.625	.012	39	4.10	.095	110

E Estimated.

ST. LAWRENCE RIVER BASIN

NEAR CHAZY, NY

LOCATION.--Lat 44°53'15", long 73°28'01", Clinton County, at Cornell University meteorological station at William H. Miner Agriculture Research Institute, 0.1 mi (0.2 km) southeast of intersection of State Highway 191 and Ridge Road, and 1.4 mi (2.2 km) West of Chazy.

PERIOD OF RECORD.--Water years 1975 to current year (monthly composite).

EQUIPMENT.--The sample collector is a straight-sided glass funnel approximately 6.5 in. (165 mm) in diameter which drains into a polyethylene receiving bottle. A fritted glass disk is used as a filter between the collector and the receiving bottle and is replaced at the end of each collection period. The glass funnel is heated during the cold-weather season to aid in complete collection of snow. The receiving bottle is enclosed in an insulated box. The opening for the collector is approximately 5 ft (1.5 m) above ground level and is protected by a windshield.

REMARKS.--Inches of precipitation is that for the Cornell University meteorological station for the reported period of sampling.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

PERIOD OF COLLECTION	INCHES OF PRECIPITATION	CALCIUM (CA) (MG/L)	MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)
77/10/01 TO 77/11/01	6.54	.29	.05	.10	.03	--	1.90	.18
77/11/01 TO 77/11/30	4.58	----	---	---	---	--	13.00	.00
77/11/30 TO 77/12/31	3.85	.24	.05	.26	.18	--	1.10	.41
77/12/31 TO 78/03/01	5.06	.35	.05	.48	.02	--	2.00	.33
78/03/01 TO 78/03/31	2.69	.40	.05	.28	.02	--	.90	.29
78/03/31 TO 78/05/01	2.02	.67	.06	.15	.05	--	3.00	.27
78/05/01 TO 78/06/01	2.42	1.20	.11	.30	.22	--	7.10	.73
76/06/01 TO 78/06/30	4.23	.70	.12	.13	.07	--	4.10	.21
78/06/30 TO 78/07/31	2.14	.97	.14	.20	.10	--	6.80	.16
78/07/31 TO 78/08/31	1.74	.40	.05	.11	.11	--	6.00	.14
78/08/31 TO 78/09/29	1.63	.87	.09	.12	.10	--	3.40	.19

PERIOD OF COLLECTION	FLUORIDE (F) (MG/L)	NITRITE+ NITRATE AS N (MG/L)	AMMONIA AS N (MG/L)	PHOSPHORUS (P) (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	ACIDITY AS H (MG/L)	LEAD (PB) (UG/L)
77/10/01 TO 77/11/01	.0	.338	.263	.005	26	3.80	.142	25
77/11/01 TO 77/11/30	.0	1.000	.486	.001	56	3.50	.210	18
77/11/30 TO 77/12/31	.0	.394	.180	.004	18	4.00	.106	10
77/12/31 TO 78/03/01	.0	.605	.246	.000	22	4.00	.111	7
78/03/01 TO 78/03/31	.0	.421	.182	.000	12	5.10	.055	2
78/03/31 TO 78/05/01	.0	.955	.582	.000	39	4.20	.111	110
78/05/01 TO 78/06/01	.0	.455	.250	.008	40	4.30	.137	31
78/06/01 TO 78/06/30	.0	.509	.174	.004	34	4.30	.084	140
78/06/30 TO 78/07/31	.0	.556	.500	.007	59	4.05	.129	120
78/07/31 TO 78/08/31	.0	.455	.271	.005	64	3.65	.191	38
78/08/31 TO 78/09/29	.0	.509	.415	.001	33	4.00	.102	30

ALBANY COUNTY

424114073495402. Local number, A 636.
LOCATION.--Lat 42°41'14", long 73°49'54", Hydrologic Unit 02020006, Fuller Road, Albany.
Owner: State University of New York at Albany.
AQUIFER.--Sand of Pleistocene age.
WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in. (0.15 m), depth 21 ft (6.4 m), cased to 22 ft (6.7 m), 2-in. (0.05-m) jet point (60-gauze screen 22 ft or 6.7 m to 24 ft or 7.3 m). Well gravel packed from original depth of 26 ft (7.9 m).
DATUM.--Altitude of land-surface datum is 260 ft (79 m), from topographic map. Measuring point: Top of casing, 2.40 ft (0.732 m) above land-surface datum.
REMARKS.--This well drilled May 1974 as a replacement for 424114073495401 (local number A 635), located 35 ft (10.7 m) north, which has a period of record from November 1965 to May 1974 (unpublished).
PERIOD OF RECORD.--October 1976 to current year. Unpublished record for May 1974 to September 1976 is available in files of the Geological Survey.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 6.12 ft (1.87 m) below land-surface datum, April 12, 13, 1978; lowest, 9.72 ft (2.96 m) below land-surface datum, Sept. 20, 21, 1977.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
HIGHEST FOR THE DAY (FROM RECORDER GRAPH)

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 05.1977	9.20	DEC 31.1977	7.34	APR 10.1978	6.13	JUL 10.1978	7.88
10	9.14	JAN 05.1978	7.31	20	6.21	15	8.05
15	9.12	10	7.09	25	6.29	20	8.19
20	8.81	31	6.92	30	6.38	25	8.32
25	8.51	FEB 05	6.95	MAY 05	6.49	31	8.47
31	8.42	10	7.02	10	6.60	AUG 05	8.56
NOV 05	8.41	15	7.14 E	15	6.71	10	8.60
10	8.38	20	7.27	20	6.78	15	8.65
15	8.21	25	7.37 E	25	6.87	20	8.74
20	8.10	28	7.44	31	6.98	25	8.84
25	8.03	MAR 10	7.61 E	JUN 05	7.09	31	8.95
30	7.98	15	7.41	10	7.19	SEP 05	9.05
DEC 05	7.74	20	7.15	15	7.29	10	9.18
10	7.64	25	6.73 E	20	7.38	15	9.29
15	7.58	APR 05	6.19	25	7.48	20	9.38
20	7.53			30	7.59	25	9.47
25	7.43			JUL 05	7.73	30	9.63

WTR YEAR 1978 HIGHEST 6.12 Apr. 12, 13, 1978 LOWEST 9.63 Sept. 30, 1978

E Estimated.

424044073535101. Local number, A 637.
LOCATION.--Lat 42°40'44", long 73°53'51", Hydrologic Unit 02020006, Dr. Shaw Road, Guilderland.
Owner: Mill Hill Missionaries.
AQUIFER.--Sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 6 in. (0.15 m), depth 198 ft (60.4 m), cased to 193 ft (58.8 m), 30-slot plastic openings section 193 ft (58.8 m) to 198 ft (60.4 m).
DATUM.--Altitude of land-surface datum is 220 ft (67 m), from topographic map. Measuring point: Top of coupling, 3.50 ft (1.067 m) above land-surface datum.
PERIOD OF RECORD.--September 1976 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 115.79 ft (35.29 m) below land-surface datum, April 6, 1977; lowest measured, 126.55 ft (38.57 m) below land-surface datum, September 27, 1978.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, SEPTEMBER 1976 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
SEP 22,1976	116.32	JAN 18,1977	117.29	AUG 05,1977	120.06	APR 18,1978	121.15
23	116.47	FEB 09	119.62	SEP 27	116.28	MAY 16	121.45
27	116.47	MAR 11	119.02	NOV 09	116.48	JUN 12	121.70
OCT 19	118.43	APR 06	115.79	JAN 12,1978	119.10	JUL 11	123.20
NOV 05	116.39	MAY 19	117.25	FEB 21	120.71	AUG 02	122.95
12	115.88	JUN 10	119.39	24	119.31	30	121.10
DEC 15	123.37	JUL 06	120.90	MAR 23	122.41	SEP 27	126.55

BROOME COUNTY

420646075531201. Local number, Bm 100.

LOCATION.--Lat 42°06'46", long 75°53'12", Hydrologic Unit 02050103, at Moeller and Frederick Streets, Binghamton. Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 6 in. (0.15 m), depth 52 ft (15.8 m), cased to 52 ft (15.8 m), slotted 40 ft (12.2 m) to 45 ft (13.7 m).

DATUM.--Altitude of land-surface datum is 850 ft (259 m), from topographic map. Measuring point: Top of coupling, at land-surface datum.

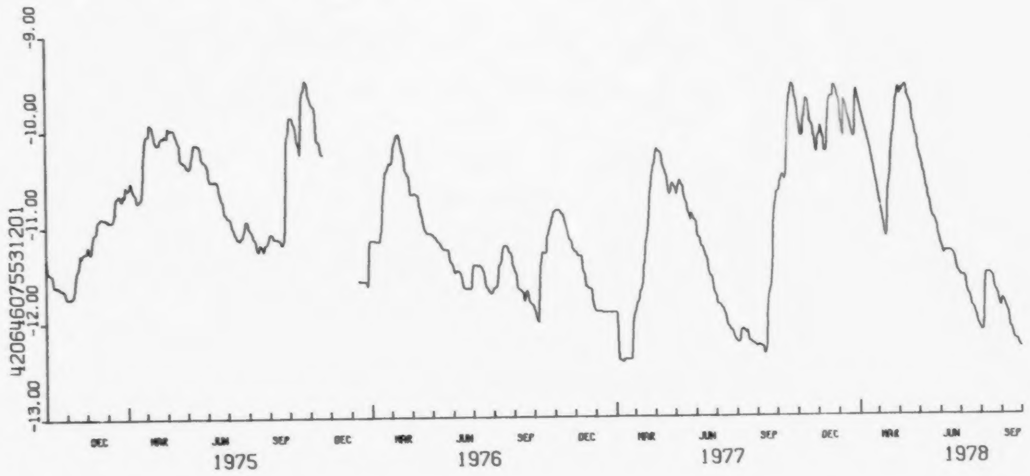
PERIOD OF RECORD.--October 1977 to September 1978. Unpublished record for October 1946 to July 1955 (intermittent), April 1966 to April 1968 (intermittent) and May 1968 to September 1977 is available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.87 ft (2.70 m) below land-surface datum, July 3, 1972; lowest measured 12.83 ft (3.91 m) below land-surface datum, October 13, 1946.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10.69	9.75	10.14	9.68	9.73	10.68	9.57	10.25	11.16	11.53	12.10	11.83
2	10.66	9.82	10.08	9.69	9.76	10.72	9.61	10.28	11.22	11.53	12.12	11.81
3	10.66	9.91	10.07	9.79	9.79	10.76	9.65	10.32	11.22	11.55	12.12	11.79
4	10.65	9.94	10.07	9.92	9.82	10.80	9.64	10.34	11.25	11.55	12.12	11.80
5	10.65	9.98	10.04	9.93	9.85	10.84	9.59	10.34	11.26	11.55	12.12	11.82
6	10.58	10.07	9.97	9.95	9.88	10.88	9.62	10.40	11.30	11.55	12.00	11.84
7	10.54	10.07	10.03	10.03	9.91	10.92	9.59	10.46	11.32	11.55	11.75	11.85
8	10.54	10.08	10.09	10.08	9.94	10.96	9.58	10.46	11.30	11.55	11.64	11.88
9	10.50	10.07	10.08	9.87	9.97	11.00	9.58	10.47	11.29	11.56	11.53	11.89
10	10.48	10.02	10.13	9.70	10.00	11.04	9.58	10.51	11.29	11.59	11.52	11.92
11	10.48	9.92	10.24	9.72	10.03	11.08	9.56	10.58	11.29	11.68	11.52	11.93
12	10.48	9.87	10.24	9.75	10.06	11.11	9.55	10.63	11.29	11.71	11.52	11.95
13	10.53	9.86	10.24	9.78	10.09	11.14	9.58	10.63	11.29	11.73	11.52	12.07
14	10.53	9.75	10.24	9.81	10.12	11.10	9.66	10.66	11.29	11.74	11.52	12.09
15	10.48	9.69	10.13	9.84	10.15	10.85	9.67	10.73	11.29	11.75	11.52	12.09
16	10.43	9.69	9.97	9.87	10.18	10.68	9.69	10.75	11.29	11.76	11.52	12.09
17	10.23	9.69	9.88	9.90	10.21	10.58	9.71	10.75	11.29	11.80	11.53	12.12
18	9.99	9.73	9.74	9.93	10.24	10.57	9.73	10.82	11.29	11.85	11.54	12.15
19	9.88	9.87	9.69	9.97	10.28	10.47	9.74	10.86	11.29	11.86	11.55	12.19
20	9.75	9.93	9.68	10.00	10.32	10.38	9.74	10.90	11.30	11.87	11.56	12.21
21	9.68	9.94	9.67	10.03	10.36	10.28	9.83	10.92	11.31	11.88	11.66	12.21
22	9.66	9.95	9.66	10.06	10.40	10.17	9.93	10.94	11.33	11.89	11.68	12.21
23	9.62	9.96	9.67	10.09	10.44	10.07	9.95	10.94	11.34	11.90	11.69	12.22
24	9.57	9.99	9.67	10.09	10.48	10.06	9.95	10.94	11.36	11.94	11.71	12.22
25	9.55	10.08	9.57	10.09	10.52	10.04	10.01	10.96	11.41	11.95	11.72	12.22
26	9.53	10.07	9.55	9.98	10.56	9.95	10.07	10.98	11.44	11.98	11.74	12.25
27	9.54	10.13	9.55	9.72	10.60	9.89	10.08	11.01	11.49	12.03	11.76	12.27
28	9.58	10.19	9.58	9.59	10.64	9.76	10.09	11.02	11.50	12.05	11.80	12.27
29	9.67	10.25	9.59	9.63	---	9.68	10.14	11.07	11.50	12.06	11.83	12.29
30	9.68	10.25	9.63	9.67	---	9.68	10.23	11.11	11.51	12.07	11.86	12.30
31	9.72	---	9.67	9.70	---	9.66	---	11.14	---	12.09	11.87	---

WTR YEAR 1978 HIGHEST 9.53 Oct. 26, 1977 LOWEST 12.30 Sept. 30, 1978



BROOME COUNTY

420657075583501. Local number, Bm 121.
LOCATION.--Lat 42°06'57", long 75°58'35", Hydrologic Unit 02050103, at Camden and Main Streets, Johnson City.
Owner: U.S. Geological Survey.
AQUIFER.--Glacial sand of Pleistocene age.
WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in. (0.15 m), depth 53 ft (16.2 m), cased to 53 ft (16.2 m), open end.
DATUM.--Altitude of land-surface datum is 835 ft (255 m), from topographic map. Measuring point: Top of casing, 3.17 ft (0.966 m) above land-surface datum.
REMARKS.--Well cleaned from 46 ft (14.0 m), to original depth on Oct. 19, 1970. Water level affected by floods of Susquehanna River, and by pumping from municipal well field 1,100 ft (335 m) south.
PERIOD OF RECORD.--March 1947 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 9.73 ft (2.97 m) below land-surface datum, Apr. 8, 1956; lowest, 33.47 ft (10.20 m) below land-surface datum, Sept. 23, 1965.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
HIGHEST FOR THE DAY (FROM RECORDER GRAPH)

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 05.1977	19.51	DEC 31.1977	21.35	MAR 31.1978	18.19	JUN 25.1978	24.94
10	20.95	JAN 05.1978	21.97	APR 05	17.54	30	25.30
20	15.00	10	20.35	10	17.49	JUL 05	25.67
25	17.26	15	20.05	15	18.51	10	26.00
31	20.18	20	18.75	25	20.92	15	26.36
NOV 05	21.82	25	19.18	30	21.95	20	26.59
10	21.20	31	17.67	MAY 05	22.76	25	26.96
15	19.98	FEB 05	19.64	10	23.19	31	27.29
20	20.99	10	19.58	15	23.70	AUG 05	27.35
25	21.75	15	20.57	20	23.95	10	26.49
30	22.31	20	21.72	25	23.98	SEP 05	27.70
DEC 05	20.85	28	23.13	31	24.25	10	27.92
10	21.52	MAR 05	23.73	JUN 05	24.60	15	28.01
15	19.53	15	24.10	10	24.62	20	27.84
20	19.45	20	23.10	15	24.62	25	27.50
25	20.38	25	20.41	20	24.84	30	27.70

WTR YEAR 1978 HIGHEST 14.94 Oct. 21, 1977 LOWEST 28.04 Sept. 18, 1978

CATTARAUGUS COUNTY

420530078445201. Local number, Ct 121.
LOCATION.--Lat 42°05'30", long 78°44'52", Hydrologic Unit 05010001, near Red House.
Owner: State Department of Environmental Conservation.
AQUIFER.--Sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 6 in. (0.15 m), depth 53 ft (16.2 m), cased to 53 ft (16.2 m), open end.
DATUM.--Altitude of land-surface datum is 1,470 ft (448 m), from topographic map. Measuring point: Top of casing, 0.30 ft (0.091 m) above land-surface datum.
REMARKS.--Unusually low water levels experienced since July 4, 1969. (Lowest previous measurement was 13.23 ft or 4.03 m, Feb. 1, 1961). Extreme low levels occur during late summer and fall months, with lower than normal levels prevalent throughout the year. A source of nearby pumping has not been determined.
PERIOD OF RECORD.--September 1950 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured 3.29 ft (1.00 m) below land-surface datum, Dec. 15, 1967; lowest measured 34.87 ft (10.62 m) below land-surface datum, Nov. 21, 1972.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 07.1977	9.82	DEC 23.1977	9.15	MAR 24.1978	5.10	JUN 09.1978	7.91
14	7.96	30	13.61	31	4.55	17	8.06
21	6.99	JAN 06.1978	16.17	APR 07	3.82	27	8.36
28	6.16	13	13.65	14	3.50	30	8.58
NOV 04	6.14	20	11.67	21	3.37	JUL 07	10.20
11	5.64	27	8.59	28	6.22	17	11.51
18	5.18	FEB 17	6.01	MAY 05	8.10	24	12.25
25	7.29	24	5.62	12	9.27	31	13.59
DEC 02	7.97	MAR 03	5.73	19	9.32		
09	8.74	10	5.71	26	11.17		
16	9.25	17	5.58	JUN 05	8.70		

CAYUGA COUNTY

424158076251901. Local number, Cy 7.
LOCATION.--Lat 42°41'58", long 76°25'19", Hydrologic Unit 04140201, near Moravia.
Owner: Earl Van Pelt.
AQUIFER.--Clayey gravel of Pleistocene age.
WELL CHARACTERISTICS.--Bored observation water-table well, diameter 2.5 in. (0.06 m), depth 28 ft (8.5 m), cased to 26 ft (7.9 m), 1.25-in. (0.03-m) well point (60-gauze screen 26 ft or 7.9 m to 28 ft or 8.5 m).
DATUM.--Altitude of land-surface datum is 765 ft (233 m), from topographic map. Measuring point: Top of casing, 3.00 ft (0.914 m) above land-surface datum.
PERIOD OF RECORD.--October 1976 to current year. Unpublished record for December 1965 to September 1976 is available in files of the Geological Survey.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.91 ft (3.63 m) below land-surface datum, June 26, 1972; lowest measured, 24.53 ft (7.48 m) below land-surface datum, Oct. 20, 1973.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 05,1977	15.79	DEC 20,1977	16.12	MAR 10,1978	18.74	JUN 05,1978	18.63
14	16.67	27	17.10	17	18.04	12	18.46
20	15.29	JAN 06,1978	17.72	24	16.29	19	18.74
28	17.12	13	17.23	31	16.15	27	18.81
NOV 03	17.67	17	17.64	APR 07	15.25	JUL 04	20.32
09	17.50	26	16.71	14	16.68	AUG 14	21.23
15	16.66	FEB 03	18.31	24	16.84	22	22.33
22	17.14	11	17.88	MAY 01	17.62	28	23.14
30	17.70	17	18.21	10	17.79	SEP 04	23.65
DEC 10	17.63	23	19.51	15	17.75	11	22.45
13	17.64	MAR 03	18.65	22	17.68	26	20.52

CHAUTAUQUA COUNTY

420326079295801. Local number, Cu 5.
LOCATION.--Lat 42°03'26", long 79°29'58", Hydrologic Unit 05010002, near Panama.
Owner: State Department of Environmental Conservation.
AQUIFER.--Glacial till of Pleistocene age.
WELL CHARACTERISTICS.--Dug unused water-table well, diameter 36 in. (0.91 m), depth 33 ft (10.1 m), stone-lined.
DATUM.--Altitude of land-surface datum is 1,750 ft (533 m), from topographic map. Measuring point: Top of 0.25-in. (0.006-m) steel-plate well cover, inside shelter door, 0.44 ft (0.134 m) below land-surface datum.
PERIOD OF RECORD.--May 1949 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured 0.95 ft (0.29 m) below land-surface datum, Dec. 26, 1968; lowest measured 9.41 ft (2.87 m) below land-surface datum, May 24, 1949.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 06,1977	2.05	JAN 05,1978	1.95	APR 07,1978	1.40	JUL 06,1978	3.10
13	2.20	12	2.00	14	1.50	13	3.40
20	2.30	19	2.10	21	1.35	20	3.75
27	2.45	26	2.20	28	1.40	26	4.00
NOV 03	2.55	FEB 02	2.25	MAY 04	1.50	AUG 04	3.90
10	2.30	09	2.35	11	2.00	10	3.95
17	2.05	16	2.40	18	2.20	17	4.00
24	1.80	23	2.48	25	2.35	24	4.10
DEC 01	1.90	MAR 02	2.60	JUN 01	2.50	31	4.25
08	2.00	09	2.70	08	2.60	SEP 07	4.30
15	2.20	16	2.40	15	2.75	14	4.15
22	2.25	23	2.10	22	2.85	21	4.00
29	2.20	30	1.90	29	2.95	28	3.90

CHAUTAUQUA COUNTY

420815079121401. Local number, Cu 10.
LOCATION.--Lat 42°08'15", long 79°12'14", Hydrologic Unit 05010002, at Falconer.
Owner: City of Jamestown.
AQUIFER.--Sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 12 in. (0.30 m) to 10 in. (0.25 m), depth 232 ft (70.7 m), filled in from original depth of 240 ft (73.2 m), cased 12-in. (0.30-m) 0 ft (0.0 m) to 130 ft (39.6 m), 10-in. (0.25-m) 130 ft (39.6 m) to 240 ft (73.2 m), slotted 130 ft (39.6 m) to 144 ft (43.9 m), open end.
DATUM.--Altitude of land-surface datum is 1,250 ft (381 m), from topographic map. Measuring point: Top of flange, 5.00 ft (1.524 m) above land-surface datum.
REMARKS.--Water level affected by pumping (average 5 mgal/d or 18,900 m^3/d in 1977) from municipal well field.
PERIOD OF RECORD.--October 1976 to current year. Unpublished record for November 1939 to September 1943, August 1946 to September 1976 is available in files of the Geological Survey.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 5.2 ft (1.6 m) above land-surface datum, Mar. 14, 1942; lowest, 66.6 ft (20.3 m) below land-surface datum, Nov. 3, 1971.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
WEEKLY HIGHEST (FROM RECORDER GRAPH)

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02,1977	21.41	DEC 02,1977	24.62	APR 14,1978	31.96	MAY 19,1978	35.10
14	21.87	19	23.53	21	32.79	JUN 02	36.66
28	26.28	FEB 14,1978	27.25	MAY 15	34.98 E		

E Estimated.

CHEMUNG COUNTY

420829076484801. Local number, Cm 46.
LOCATION.--Lat 42°08'29", long 76°48'48", Hydrologic Unit 02050105, near Horseheads.
Owner: Milton A. Roy.
AQUIFER.--Glacial sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 6 in. (0.15 m), depth 34 ft (10.4 m), cased to 34 ft (10.4 m), open end.
DATUM.--Altitude of land-surface datum is 880 ft (268 m), from topographic map. Measuring point: Top of extended casing, 3.35 ft (1.021 m) above land-surface datum.
REMARKS.--Water level affected by floods of Newton Creek.
PERIOD OF RECORD.--October 1976 to current year. Unpublished record for October 1955 to September 1976 is available in files of the Geological Survey.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 18.93 ft (5.77 m) below land-surface datum, Apr. 25, 1961; lowest measured, 25.73 ft (7.84 m) below land-surface datum, Aug. 24, 1974.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01,1977	23.92	DEC 31,1977	23.10	APR 07,1978	22.02	JUL 08,1978	24.76
08	23.93	JAN 07,1978	23.44	15	22.89	15	24.90
15	24.08	14	22.98	22	22.98	22	24.92
22	22.90	23	23.50	29	23.55	29	25.08
30	23.65	28	20.90	MAY 06	23.45	AUG 05	24.95
NOV 05	22.25	FEB 04	23.10	13	23.68	12	24.89
12	22.90	24	23.97	23	23.20	19	25.02
19	22.90	25	23.97	27	23.92	26	25.14
26	23.35	MAR 04	24.11	JUN 03	24.20	SEP 02	25.14
DEC 03	23.12	11	24.20	10	24.20	09	25.18
10	23.60	18	22.98	17	24.40	16	25.27
17	22.50	25	21.82	24	24.58	23	25.29
24	22.82	APR 01	21.84	JUL 01	24.95		

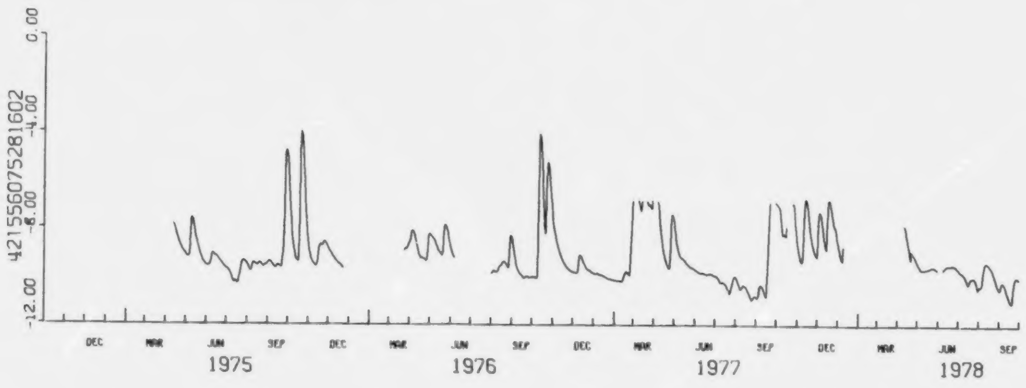
CHENANGO COUNTY

421556075281602. Local number, Cn 12.
LOCATION.--Lat 42°15'56", long 75°28'16", Hydrologic Unit 02050101, near Bainbridge.
Owner: Ilse Maehlman.
AQUIFER.--Gravel of Pleistocene age.
WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in. (0.15 m), depth 13 ft (4.0 m), cased to 13 ft (4.0 m), gravel-packed, open end.
DATUM.--Altitude of land-surface datum is 980 ft (299 m), from topographic map. Measuring point: Filemark at top of flange, 1.33 ft (0.405 m) above land-surface datum.
REMARKS.--This well drilled April 1974 as a replacement for 421556075281601 (local number Cn 11), located 90 ft (27.4 m) north, which has a period of record from October 1965 to September 1972 (unpublished).
PERIOD OF RECORD.--October 1976 to current year. Unpublished record for April 1975 to September 1976 is available in files of the Geological Survey.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.88 ft (1.18 m) below land-surface datum, Oct. 21, 1975; lowest, 11.03 ft (3.36 m) below land-surface datum, Sept. 20, 1978.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	8.61	9.15	8.61			---	9.36	9.66	9.61	---	10.48
2	---	8.80	8.55	8.74			---	9.42	9.67	9.64	---	10.49
3	---	8.96	7.68	8.88			---	9.48	---	9.68	10.33	10.39
4	---	9.09	7.28	9.03			---	9.53	---	9.72	10.35	10.26
5	---	9.20	7.24	9.13			---	9.58	---	9.75	10.35	10.19
6	7.10	9.29	7.31	9.21			---	9.63	---	9.77	10.29	10.16
7	7.42	9.34	7.47	9.27			---	9.66	---	9.78	10.14	10.18
8	7.73	9.38	7.68	9.32			---	---	9.67	9.79	9.85	10.23
9	8.02	9.31	7.92	8.73			---	---	9.66	9.82	9.62	10.30
10	8.24	8.87	8.15	---			---	---	9.64	9.85	9.48	10.39
11	8.23	8.18	8.36	---			7.28	---	9.60	9.90	9.41	10.48
12	8.16	7.23	8.55	---			7.40	9.66	9.56	9.96	9.37	10.56
13	8.18	6.74	8.71	---			7.57	---	9.54	10.03	9.36	10.65
14	8.23	6.70	8.83	---			7.73	---	9.52	10.09	9.37	10.73
15	8.29	6.76	8.85	---			7.89	---	9.49	10.17	9.39	10.80
16	7.86	6.95	8.19	---			8.04	---	---	10.24	9.42	10.87
17	---	7.21	7.21	---			8.20	---	---	10.24	9.45	10.93
18	---	7.50	6.79	---			8.36	---	---	10.19	9.50	10.98
19	---	7.78	6.74	---			8.52	---	9.48	10.12	9.54	11.02
20	---	8.03	6.82	---			8.67	9.61	9.49	10.05	9.59	11.02
21	---	8.23	6.98	---			8.81	9.58	9.48	10.00	9.65	10.87
22	---	8.41	7.17	---			8.90	9.56	9.46	9.97	9.72	10.51
23	---	8.56	7.36	---			8.97	9.54	---	---	9.80	10.26
24	---	8.68	7.53	---			9.01	---	---	---	9.89	10.11
25	---	8.79	7.69	---			9.05	---	---	---	9.98	10.02
26	---	8.88	7.82	---			9.09	---	---	9.98	10.07	9.97
27	6.87	8.96	7.89	---			9.13	9.54	9.48	10.04	10.16	9.94
28	7.34	9.03	7.93	---			9.19	9.56	9.50	10.13	10.24	9.95
29	7.75	9.09	8.07	---			9.24	9.58	9.54	10.22	10.31	9.98
30	8.09	9.14	8.34	---			9.30	9.60	9.57	10.28	10.37	10.03
31	8.37	---	8.47	---			---	9.63	---	---	10.43	---

WTR YEAR 1978 HIGHEST 6.68 Oct. 27, 1977 LOWEST 11.03 Sept. 20, 1978



CORTLAND COUNTY

423541076114701. Local number, C 102.
LOCATION.--Lat 42°35'41", long 76°11'47", Hydrologic Unit 02050102, at Municipal Water Works, Cortland.
Owner: City of Cortland.
AQUIFER.--Glacial gravel of Pleistocene age.
WELL CHARACTERISTICS.--Driven unused water-table well, diameter 1.25 in. (0.03 m), depth 45 ft (13.7 m), 1.25 in. (0.03 m) well point.
DATUM.--Altitude of land-surface datum is 1,140 ft (347 m), from topographic map. Measuring point: Top of coupling, 2.00 ft (0.610 m) above land-surface datum.
REMARKS.--Water level may be affected by pumping from nearby municipal supply wells. This well is a replacement for 423539076114801 (local number C 19), located 80 ft (24.4 m) southwest, which has a period of record from February 1947 to May 1976.
PERIOD OF RECORD.--October 1977 to September 1978. Unpublished record for October 1975 to September 1977 is available in files of the Geological Survey.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.07 ft (0.94 m) below land-surface datum, September 25, 1977; lowest measured, 11.75 ft (3.58 m) below land-surface datum, September 27, 1978.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 07,1977	4.02	JAN 27,1978	4.42	APR 27,1978	4.97	AUG 04,1978	7.72
14	4.33	FEB 10	4.80	MAY 05	5.00	11	8.56
31	4.68	17	4.82	11	5.07	16	8.92
NOV 04	4.42	23	5.25	19	5.68	25	9.22
11	4.28	MAR 03	5.77	25	6.39	SEP 01	10.05
18	4.87	10	5.59	JUN 02	5.70	08	10.19
25	4.45	17	5.15	07	5.73	15	11.64
DEC 02	4.53	24	4.15	16	5.87	22	11.37
09	4.78	31	4.13	23	6.17	27	11.75
16	4.42	APR 07	3.84	30	6.46		
JAN 06,1978	4.97	14	4.26	JUL 24	7.75		
13	3.78	20	4.55	28	7.75		

DUTCHESS COUNTY

414737073563301. Local number, Du 321.
LOCATION.--Lat 41°47'37", long 73°56'33", Hydrologic Unit 02020008, near Hyde Park.
Owner: U.S. National Park Service.
AQUIFER.--Shale of Ordovician age.
WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 6 in. (0.15 m), depth 128 ft (39.0 m), open hole.
DATUM.--Altitude of land-surface datum is 170 ft (52 m), from topographic map. Measuring point: Top of casing, 3.10 ft (0.944 m) above land-surface datum.
REMARKS.--Water level affected by earth tides (approximately 0.05 ft or 0.015 m).
PERIOD OF RECORD.--September 1948 to April 1950, April 1953 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 65.62 ft (20.00 m) below land-surface datum, June 22, 1953; lowest, 73.85 ft (22.51 m) below land-surface datum, Sept. 13, 1966.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
HIGHEST FOR THE DAY (FROM RECORDER GRAPH)

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 05,1977	68.40	APR 10,1978	65.94 E	JUN 10,1978	65.90	AUG 10,1978	67.04
10	68.36	15	65.91 E	15	66.05	15	67.17
15	68.33	20	65.79	20	66.07	20	67.28
NOV 05	68.47	25	65.92	25	66.14	25	67.44
10	67.93	30	65.97	30	66.24	31	67.48
DEC 05	67.89	MAY 05	66.10	JUL 05	66.49	SEP 05	67.56
10	67.98	10	66.12	10	66.53	10	67.74
15	67.80	15	66.19	15	66.61	27	68.05 S
20	67.72	20	66.11	20	66.78	30	68.14
25	67.58	25	66.02	25	66.91		
JAN 05,1978	67.40	31	65.99	31	66.93		
MAR 15	67.02	JUN 05	65.97	AUG 05	67.12		

WTR YEAR 1978 HIGHEST 65.77 Apr. 21, 1978 LOWEST 68.61 Oct. 8, 1977

E Estimated.

S Steel tape measurement.

DUTCHESS COUNTY

414128073475201. Local number, Du 1009.
LOCATION.--Lat 41°41"28", long 73°47'52", Hydrologic Unit 02020008, James Baird State Park, near Pleasant Valley. Owner: James Baird State Park.
AQUIFER.--Sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Bored observation water-table well, diameter 2.5 in. (0.06 m), depth 27 ft (8.2 m), cased to 25 ft (7.6 m), 1.25-in. (0.03-m) well point (60-gauze screen 25 ft or 7.6 m to 27 ft or 8.2 m).
DATUM.--Altitude of land-surface datum is 330 ft (101 m), from topographic map. Measuring point: Top of casing, 2.10 ft (0.640 m) above land-surface datum.
PERIOD OF RECORD.--October 1976 to current year. Unpublished record for October 1965 to April 1969, June 1971 to September 1976 is available in files of the Geological Survey.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.92 ft (3.63 m) below land-surface datum, Sept. 14, 1971; lowest measured, 20.60 ft (6.28 m) below land-surface datum, Nov. 24, 1965.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03.1977	18.65	DEC 27.1977	12.72	APR 03.1978	12.83	JUN 26.1978	14.80
11	17.62	JAN 02.1978	13.04	10	13.18	JUL 03	15.33
17	15.87	10	12.82	17	13.60	10	15.80
25	13.85	16	12.89	24	13.88	17	16.27
NOV 01	13.95	23	12.90	MAY 01	14.17	24	16.72
07	14.03	30	12.42	08	14.39	AUG 01	17.23
14	13.00	FEB 13	13.42	15	14.25	14	17.54
22	13.30	21	13.98	22	13.31	SEP 11	18.71
29	13.19	27	14.27	30	13.22	18	18.99
DEC 05	12.70	MAR 06	14.52	JUN 05	13.56		
13	13.12	13	14.77	12	13.93		
19	13.03	27	12.74	19	14.37		

414857073460501. Local number, Du 1010.
LOCATION.--Lat 41°48'57", long 73°46'05", Hydrologic Unit 02020008, near Hibernia. Owner: Manuel Mastri.
AQUIFER.--Gravel of Pleistocene age.
WELL CHARACTERISTICS.--Bored observation water-table well, diameter 2.5 in. (0.06 m), depth 21 ft (6.4 m), cased to 19 ft (5.8 m), 1.25-in. (0.03-m) well point (60-gauze screen 19 ft or 5.8 m to 20 ft or 6.1 m).
DATUM.--Altitude of land-surface datum is 250 ft (76 m), from topographic map. Measuring point: Top of extended casing, 2.90 ft (0.883 m) above land-surface datum.
PERIOD OF RECORD.--October 1976 to current year. Unpublished record for November 1965 to September 1976 is available in files of the Geological Survey.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 6.88 ft (2.09 m) below land-surface datum, Mar. 30, 1977; lowest, 12.52 ft (3.82 m) below land-surface datum, Aug. 27, 1966.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
HIGHEST FOR THE DAY (FROM RECORDER GRAPH)

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 05,1977	11.55	DEC 31,1977	9.55	MAR 20,1978	9.55	JUN 15,1978	10.34
10	11.26	JAN 05,1978	10.11	25	8.63	25	11.09
15	11.36	10	8.70	31	7.92	30	11.42
20	10.94	15	9.30	APR 05	8.98	JUL 10	11.71
25	10.98	20	9.92	10	9.80	15	11.90
31	11.22	25	9.79	15	10.21	20	11.97
NOV 10	9.72	31	8.07	25	10.85	AUG 10	11.66
15	10.04	FEB 05	9.48	30	11.13	15	12.05
20	10.35	10	10.03	MAY 05	11.32	25	12.31
25	10.58	15	10.48	10	11.26	31	12.30
30	10.19	20	10.81	15	11.33	SEP 05	12.31
DEC 05	9.54	25	10.99	20	10.91	10	12.42
10	9.93	28	11.20	25	10.69	20	11.81
15	9.37	MAR 05	11.23	JUN 05	10.86	25	12.16
20	9.45	10	11.35	10	10.16	30	12.26
25	8.91	15	9.67				

WTR YEAR 1978 HIGHEST 7.12 Jan. 27, 1978 LOWEST 12.43 Sept. 11, 1978

GENESEE COUNTY

425516078032001. Local number, Gs 2.
LOCATION.--Lat 42°55'16", long 78°03'20", Hydrologic Unit 04130003, near Pavilion.
Owner: Angeline C. Rigoni.
AQUIFER.--Glacial till of Pleistocene age.
WELL CHARACTERISTICS.--Dug unused water-table well, diameter 36 in. (0.91 m), depth 21 ft (6.4 m), stone-lined.
DATUM.--Altitude of land-surface datum is 1,030 ft (314 m), from topographic map. Measuring point: Painted arrow on top edge of concrete well cover, inside shelter door, 1.12 ft (0.341 m) above land-surface datum.
PERIOD OF RECORD.--September 1950 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured 0.10 ft (0.03 m) below land-surface datum, May 14, 1960, Feb. 28, 1971, and Feb. 13, 1976; lowest measured 6.55 ft (2.00 m) below land-surface datum, Feb. 11, 1961.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01.1977	0.61	JAN 07.1978	1.03	APR 08.1978	0.60	JUL 15.1978	2.34
08	0.74	14	1.04	15	0.86	22	2.63
18	0.78	24	1.30	22	0.53	29	1.66
22	1.00	28	0.74	29	1.05	AUG 05	1.27
29	1.31	FEB 04	0.90	MAY 06	1.16	12	1.81
NOV 05	0.71	11	1.08	13	1.10	19	1.58
14	0.68	18	1.22	20	0.69	26	1.37
19	0.71	25	1.34	27	1.19	SEP 02	1.82
26	0.81	MAR 04	1.53	JUN 03	1.57	09	2.12
DEC 03	0.74	11	1.63	10	0.90	16	0.58
17	0.74	18	0.65	17	1.51	23	0.92
27	0.75	25	0.68	JUL 05	1.90	30	1.44
31	0.93	APR 01	0.60	08	2.03		

GREENE COUNTY

422319073482001. Local number, G 1.
LOCATION.--Lat 42°23'19", long 73°48'20", Hydrologic Unit 02020006, near West Coxsackie.
Owner: Fred Kropp.
AQUIFER.--Glacial till of Pleistocene age.
WELL CHARACTERISTICS.--Dug domestic water-table well, diameter 36 in. (0.91 m), depth 19 ft (5.8 m), tile-lined to 2 ft (0.6 m), stone-lined to 19 ft (5.8 m).
DATUM.--Altitude of land-surface datum is 130 ft (40 m), from topographic map. Measuring point: Chiseled square on top of inner step on curb, 0.18 ft (0.055 m) below land-surface datum.
PERIOD OF RECORD.--December 1945 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured 1.07 ft (0.33 m) below land-surface datum, Mar. 15, 1962; lowest measured 15.56 ft (4.74 m) below land-surface datum, Feb. 27, 1963.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04.1977	2.93	JAN 04.1978	4.16	APR 06.1978	2.87	JUL 07.1978	4.02
11	3.13	11	3.14	13	2.79	14	4.63
18	2.50	19	4.04	21	2.51	21	4.90
25	3.20	26	2.62	27	3.28	28	5.15
NOV 01	3.67	FEB 02	3.73	MAY 04	3.94	AUG 04	4.75
09	2.16	09	4.29	11	3.43	11	3.28
15	2.99	16	4.60	18	2.39	18	4.04
22	3.41	23	4.78	25	2.50	27	4.48
29	2.96	MAR 02	5.00	JUN 01	3.84	SEP 01	3.79
DEC 07	3.18	09	5.18	08	3.24	08	4.38
14	2.58	16	2.90	15	3.75	16	4.90
21	3.03	23	2.52	22	3.21	23	4.07
29	3.65	30	2.63	29	4.17	29	4.60

HAMILTON COUNTY

432832074122201. Local number, H 3.
LOCATION.--Lat 43°28'32", long 74°12'22", Hydrologic Unit 02020002, near Griffin.
Owner: F. B. Girard.
AQUIFER.--Sand of Pleistocene age.
WELL CHARACTERISTICS.--Bored observation water-table well, diameter 2.5 in. (0.06 m), depth 16 ft (4.9 m), filled in from original depth of 19 ft (5.8 m), cased to 16 ft (4.9 m), 1.25-in. (0.03-m) well point (60-gauze screen 16 ft or 4.9 m to 19 ft or 5.8 m, damaged during well installation).
DATUM.--Altitude of land-surface datum is 1,290 ft (393 m), from topographic map. Measuring point: Top of casing, 2.30 ft (0.701 m) above land-surface datum.
PERIOD OF RECORD.--October 1976 to current year. Unpublished record for November 1965 to September 1976 is available in files of the Geological Survey.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.83 ft (2.69 m) below land-surface datum, June 27, 1972; lowest measured, 15.91 ft (4.85 m) below land-surface datum, Aug. 28, 1978.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 22.1977	15.38	MAR 09.1978	13.46	JUN 15.1978	13.98
JAN 18.1978	12.85	APR 17	11.23	JUL 14	15.46
31	12.38	JUN 05	13.72	AUG 28	15.91

MADISON COUNTY

430056075354102. Local number, M 178.

LOCATION.--Lat 43°00'56", long 75°35'41", Hydrologic Unit 04140202, at Valley Mills.
Owner: Donald L. Greene.

AQUIFER.--Gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in. (0.15 m), depth 16 ft (4.9 m), cased to 16 ft (4.9 m), open end.

DATUM.--Altitude of land-surface datum is 575 ft (175 m), from topographic map. Measuring point: Top of flange, 3.06 ft (0.933 m) above land-surface datum.

REMARKS.--This well drilled April 1974 as a replacement for 430056075354101 (local number M 177), located 10 ft (3.0 m) west, which has a period of record from October 1965 to September 1973 (unpublished).

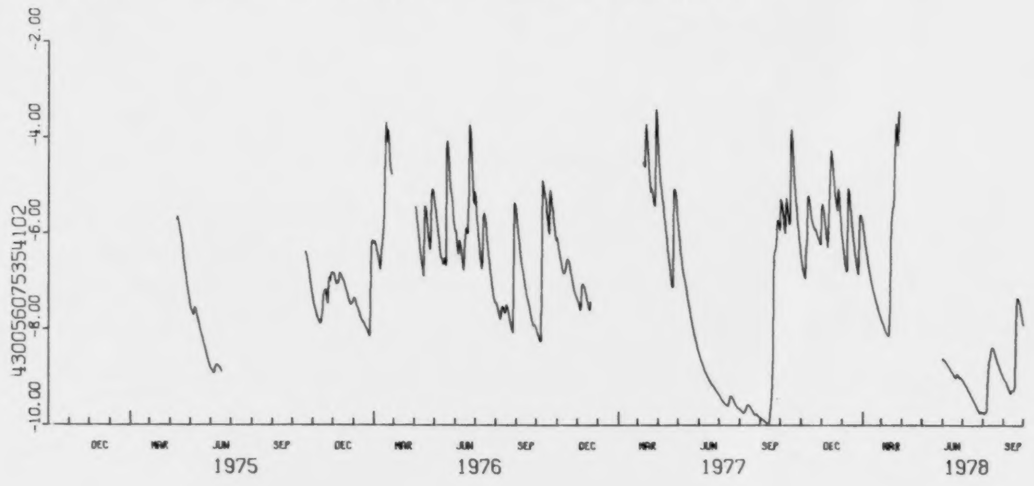
PERIOD OF RECORD.--October 1976 to current year. Unpublished record for April 1975 to September 1976 is available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.17 ft (0.97 m) below land-surface datum, Mar. 29, 1977; lowest, 10.01 ft (3.05 m) below land-surface datum, Sept. 13, 1977.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.80	6.50	5.63	6.14	5.89	7.81		---	8.61	9.05	9.73	9.03
2	5.27	6.62	5.37	6.26	5.99	7.85		---	8.65	9.07	9.75	9.05
3	5.33	6.73	5.46	6.40	6.11	7.88		---	8.65	9.09	9.77	9.07
4	5.42	6.80	5.58	6.52	6.21	7.92		---	8.63	9.12	9.75	9.09
5	5.57	6.85	5.68	6.62	6.30	7.96		---	8.65	9.14	9.72	9.12
6	5.72	6.91	5.78	6.71	6.39	8.00		---	8.68	9.17	9.72	9.16
7	5.88	6.94	5.94	6.80	6.48	8.04		---	8.70	9.20	9.68	9.19
8	6.00	6.52	6.08	6.75	6.59	8.07		---	8.72	9.22	9.20	9.23
9	5.70	6.18	6.15	5.17	6.67	8.09		---	8.74	9.25	8.91	9.27
10	5.25	6.08	6.29	5.04	6.74	8.11		---	8.77	9.28	8.73	9.30
11	5.38	5.26	---	5.21	6.82	8.13		---	8.79	9.30	8.62	9.34
12	5.51	5.20	---	5.38	6.90	8.14		---	8.81	9.33	8.58	9.33
13	5.67	5.33	---	5.54	6.97	8.06		---	8.84	9.36	8.50	9.28
14	5.80	5.44	---	5.65	7.03	7.52		---	8.86	9.39	8.40	9.27
15	5.80	5.55	4.25	5.82	7.11	6.28		---	8.89	9.41	8.37	9.27
16	5.74	5.65	4.38	5.98	7.17	5.80		---	8.91	9.44	8.38	9.28
17	4.15	5.74	4.53	6.12	7.22	5.57		---	8.93	9.47	8.42	9.23
18	3.81	5.79	4.73	6.22	7.27	5.48		---	8.96	9.50	8.47	9.20
19	4.19	5.86	4.93	6.36	7.33	5.41		---	8.98	9.52	8.52	8.35
20	4.47	5.88	5.09	6.44	7.39	5.23		---	9.00	9.55	8.57	7.55
21	4.71	5.92	5.20	6.54	7.44	4.53		---	9.02	9.58	8.62	7.34
22	4.91	5.89	5.31	6.65	7.49	3.95		---	8.97	9.61	8.67	7.33
23	5.12	5.94	5.41	6.74	7.54	3.69		---	8.93	9.64	8.70	7.36
24	5.29	6.01	5.52	6.81	7.59	3.91		---	8.93	9.67	8.74	7.41
25	5.47	6.09	5.18	6.85	7.64	4.16		---	8.96	9.69	8.78	7.49
26	5.63	6.09	5.06	6.16	7.69	4.03		---	8.99	9.72	8.82	7.58
27	5.80	6.12	5.29	5.66	7.73	3.44		---	9.02	9.75	8.86	7.65
28	5.96	6.16	5.50	5.60	7.78	3.57		---	9.01	9.75	8.89	7.74
29	6.11	6.23	5.69	5.62	---	---		---	9.01	9.72	8.92	7.83
30	6.25	6.23	5.87	5.69	---	---		---	9.03	9.72	8.96	7.90
31	6.38	---	6.03	5.78	---	---		8.58	---	9.72	9.00	---

WTR YEAR 1978 HIGHEST 3.35 Mar. 27, 1978 LOWEST 9.77 Aug. 3, 1978



MONTGOMERY COUNTY

430141074423501. Local number, Mt 1.
LOCATION.--Lat 43°01'41", long 74°42'35", Hydrologic Unit 02020004, near St. Johnsville.
Owner: Marion G. Groff.
AQUIFER.--Glacial till of Pleistocene age.
WELL CHARACTERISTICS.--Dug unused water-table well, diameter 24 in. (0.61 m), depth 12 ft (3.7 m), stone-lined.
DATUM.--Altitude of land-surface datum is 710 ft (216 m), from topographic map. Measuring point: Top edge of limestone slab at northeast corner of well opening, at land-surface datum.
PERIOD OF RECORD.--October 1942 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured 3.74 ft (1.14 m) below land-surface datum, Apr. 10, 1971; lowest measured 9.99 ft (3.04 m) below land-surface datum, Aug. 28, 1949.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 11,1977	6.02	JAN 28,1978	5.58	MAY 12,1978	6.26	AUG 12,1978	7.60
25	5.87	FEB 14	6.90	20	6.06	21	8.13
27	6.03	28	7.52	29	6.72	26	8.31
NOV 03	6.52	MAR 13	7.27	JUN 15	6.33	SEP 01	8.46
14	5.38	21	5.68	26	6.61	13	8.36
DEC 03	4.54	APR 01	4.45	JUL 06	7.32	19	7.82
13	6.06	06	4.33	15	7.82	28	7.75
JAN 05,1978	6.54	22	5.18	25	8.07		
14	5.91	MAY 02	6.00	AUG 02	7.84		

NIAGARA COUNTY

430655079022001. Local number, Ni 69.
LOCATION.--Lat 43°06'55", long 79°02'20", Hydrologic Unit 04120104, 20th Street and Beech Avenue, Niagara Falls.
Owner: City of Niagara Falls.
AQUIFER.--Lockport Dolomite of Middle Silurian age.
WELL CHARACTERISTICS.--Drilled observation artesian and water-table well, diameter 8 in. (0.20 m) to 6 in. (0.15 m), depth 36 ft (11.0 m), cased 8-in. (0.20-m) 0 ft (0.0 m) to 17 ft (5.2 m), open hole 6-in. (0.15-m) 17 ft (5.2 m) to 36 ft (11.0 m).
DATUM.--Land-surface datum is 596.21 ft (181.725 m) U.S. Lake Survey datum (levels by Uhl, Hall, and Rich). Measuring point: Top of 2-in. (0.05 m) opening in 6 in. (0.15 m) plug of 8 in. (0.20 m) extended casing, 3.60 ft (1.097 m) above land-surface datum.
PERIOD OF RECORD.--October 1976 to current year. Unpublished record for October 1958 to September 1976 is available in files of the Geological Survey.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 16.40 ft (5.00 m) below land-surface datum, Mar. 31, Apr. 1, 1960; lowest measured, 22.21 ft (6.77 m) below land-surface datum, Aug. 3, 1959.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03,1977	17.43	JAN 04,1978	16.90	APR 10,1978	18.50	JUL 10,1978	20.75
12	18.37	09	15.70	17	18.88	17	20.98
17	18.90	16	18.90	25	18.50	24	21.00
24	19.72	30	19.30	MAY 01	18.90	31	20.89
31	20.00	FEB 07	19.75	08	19.30	AUG 07	20.92
NOV 07	20.20	14	19.77	15	19.40	14	20.95
14	19.70	21	20.35	22	19.57	21	20.99
22	18.58	27	20.38	30	19.87	28	20.98
28	19.00	MAR 06	19.90	JUN 06	20.19	SEP 05	21.09
DEC 03	18.98	13	20.14	12	20.03	11	21.10
12	19.00	20	17.50	20	20.29	18	20.30
19	16.45	27	17.10	27	20.40	25	20.15
26	16.90	APR 03	17.90	JUL 03	20.59		

NIAGARA COUNTY

431308078544501. Local number, Ni 70.
LOCATION.--Lat 43°13'08", long 78°54'45", Hydrologic Unit 04130001, near Ransomville.
Owner: Calvin C. Schultz.
AQUIFER.--Sand of Pleistocene age.
WELL CHARACTERISTICS.--Dug unused water-table well, diameter 4 ft (1.2 m) to 5 ft (1.5 m) (reported), depth 24 ft (7.3 m).
DATUM.--Altitude of land-surface datum is 335 ft (102 m), from topographic map. Measuring point: Top of 1-in. (0.02-m) hole in steel cover, at land-surface datum.
PERIOD OF RECORD.--October 1976 to current year. Unpublished record for August 1972 to September 1976 is available in files of the Geological Survey.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.33 ft (0.40 m) below land-surface datum, Mar. 5, 1977; lowest measured, 9.91 ft (3.02 m) below land-surface datum, Nov. 9, 1974.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01.1977	6.05	JAN 07.1978	2.45	APR 15.1978	2.41	JUL 20.1978	7.33
09	4.15	14	2.35	22	1.49	29	7.91
16	4.24	21	2.31	29	2.30	AUG 05	8.05
22	4.57	28	2.29	MAY 06	3.10	12	7.90
29	4.86	FEB 04	2.12	13	3.27	19	8.06
NOV 05	5.11	11	1.91	20	3.45	26	8.30
12	3.24	18	2.88	27	3.66	SEP 03	8.57
19	2.76	25	2.95	JUN 03	3.80	09	8.78
26	2.64	MAR 04	2.97	10	4.13	16	9.02
DEC 03	2.45	11	3.01	17	4.87	23	9.09
10	2.41	18	3.17	24	5.72	30	8.91
17	2.46	25	3.22	JUL 01	6.32		
24	2.49	APR 01	2.02	08	6.71		
31	2.56	08	1.96	15	7.09		

ONEIDA COUNTY

433112075091501. Local number, Oe 151.
LOCATION.--Lat 43°31'12", long 75°09'15", Hydrologic Unit 04150101, at Woodgate.
Owner: Henry Rubyor.
AQUIFER.--Glacial sand of Pleistocene age.
WELL CHARACTERISTICS.--Dug domestic water-table well, diameter 36 in. (0.91 m), depth 31 ft (9.4 m), stone-lined.
DATUM.--Land-surface datum is 1,484.94 ft (452.609 m) National Geodetic Vertical Datum of 1929. Measuring point: Top of 2-ft (0.6-m) square concrete well cover at midpoint of south side of rectangular opening, 1.00 ft (0.305 m) above land-surface datum.
PERIOD OF RECORD.--July 1926 to August 1945, October 1948 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured 11.43 ft (3.48 m) below land-surface datum, Apr. 3, 1976; lowest measured 30.31 ft (9.24 m) below land-surface datum, Feb. 25, 1961.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01.1977	23.78	JAN 07.1978	19.71	APR 15.1978	17.67	JUL 24.1978	24.42
08	21.42	14	18.33	22	16.55	29	26.18
15	20.01	21	18.67	29	15.36	AUG 05	25.78
25	19.44	28	19.33	MAY 06	15.82	12	25.85
29	18.89	FEB 04	19.21	13	16.38	19	26.22
NOV 05	19.75	11	19.48	20	16.94	26	26.70
12	20.73	18	20.73	27	18.45	SEP 02	26.82
19	19.58	25	21.44	JUN 03	18.78	09	26.98
26	19.41	MAR 04	21.94	10	20.24	16	26.87
DEC 03	18.61	11	22.65	17	20.88	23	27.72
10	17.75	18	23.72	24	21.54	30	27.44
17	18.28	25	24.23	JUL 01	22.48		
24	18.61	APR 01	22.99	08	23.25		
31	19.05	08	21.44	15	24.39		

ONEIDA COUNTY

433012075134202. Local number, Oe 766.
LOCATION.--Lat 43°30'12", long 75°13'42", Hydrologic Unit 04150101, near Hawkinsville.
Owner: New York State Department of Environmental Conservation.
AQUIFER.--Sand of Pleistocene age.
WELL CHARACTERISTICS.--Driven-washed observation water-table well, diameter 6 in. (0.15 m), depth 33 ft (10.1 m), cased to 33 ft (10.1 m), open end.
DATUM.--Land-surface datum is 1,190.22 ft (362.779 m) National Geodetic Vertical Datum of 1929. Measuring point: Top of extended casing, 2.63 ft (0.802 m) above land-surface datum (since March 28, 1978).
REMARKS.--This well driven-washed November 1968 as a replacement for 433012075134201 (local number Oe 765), located 15 ft (4.6 m) east, which has a period of record from November 1965 to November 1968 (unpublished).
PERIOD OF RECORD.--October 1976 to current year. Unpublished record for November 1968 to September 1976 is available in files of the Geological Survey.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 14.87 ft (4.53 m) below land-surface datum, May 21, 1972; lowest, 23.49 ft (7.16 m) below land-surface datum, Apr. 10, 11, 1970.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
HIGHEST FOR THE DAY (FROM RECORDER)

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 05,1977	21.57	MAR 28,1978	20.18 S	MAY 31,1978	17.63	AUG 05,1978	20.35
10	21.46	31	20.59	JUN 05	17.83	10	20.52
15	21.28	APR 05	20.67	10	18.05	15	20.69
20	21.09	10	20.71	15	18.27	20	20.85
25	20.92	15	20.51	20	18.47	25	21.00
NOV 01	20.65 S	20	19.87	25	18.69	31	21.17
15	20.18 S	25	18.95	30	18.88	SEP 05	21.29
DEC 16	19.68 S	30	17.95	JUL 05	19.00	10	21.43
JAN 03,1978	19.23 S	MAY 05	17.31	10	19.29	15	21.55
17	19.27 S	10	17.09	15	19.50	20	21.66
31	19.04 S	15	17.05	20	19.72	25	21.77
FEB 16	19.05 S	20	17.19	25	19.92	30	21.88
28	19.30 S	25	17.39	31	20.16		
MAR 14	19.75 S						

WTR YEAR 1978 HIGHEST 17.05 May 15, 1978 LOWEST 21.90 Sept. 30, 1978

S Steel tape measurement.

ONTARIO COUNTY

425840077133901. Local number, Ot 900.
LOCATION.--Lat 42°58'40", long 77°13'39", Hydrologic Unit 04140201, at New York State Thruway Interchange 43, near Manchester.
Owner: State Thruway Authority.
AQUIFER.--Camillus Shale of the Salina Group of Late Silurian age.
WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 6 in. (0.15 m), depth 139 ft (42.4 m), cased to 11 ft (3.4 m), open hole.
DATUM.--Altitude of land-surface datum is 555 ft (169 m), from topographic map. Measuring point: Top of casing, 11.43 ft (3.484 m) above land-surface datum.
PERIOD OF RECORD.--May 1955 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured 11.14 ft (3.40 m) above land-surface datum, Mar. 15, 1976; lowest measured 4.59 ft (1.40 m) above land-surface datum, Nov. 11, 1957.

WATER LEVEL, IN FEET ABOVE LAND-SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03,1977	+ 9.41	JAN 02,1978	+ 10.43	APR 03,1978	+ 10.36	JUL 03,1978	+ 8.80
07	9.73	09	10.58	10	10.53	10	8.63
17	10.09	16	10.57	17	10.31	17	8.43
24	9.96	23	10.27	24	10.33	24	8.12
31	9.95	30	10.73	MAY 01	10.31	31	8.24
NOV 07	10.13	FEB 06	10.66	08	10.10	AUG 07	7.94
14	10.15	13	10.66	15	10.11	14	7.91
21	10.31	20	10.49	22	10.18	21	7.63
28	10.30	27	10.43	29	9.79	28	7.73
DEC 05	10.17	MAR 06	10.01	JUN 05	9.53	SEP 04	7.44
12	10.03	13	9.80	12	9.29	11	7.38
19	10.25	20	9.98	19	9.04	18	7.65
26	10.48	27	10.38	26	9.06	25	7.78

411933074150801. Local number, O 104.

LOCATION.--Lat 41°19'33", long 74°15'08", Hydrologic Unit 02020008, near Chester.
Owner: Palisades Interstate Park Commission.

AQUIFER.--Limestone.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 6 in. (0.15 m), depth 98 ft (29.9 m), cased to 73 ft (22.3 m), open hole.

DATUM.--Altitude of land-surface datum is 445 ft (136 m), from topographic map. Measuring point: Top of extended casing, 4.49 ft (1.369 m) above land-surface datum (since July 12, 1978).

REMARKS.--Water-level fluctuations show hydraulic contact with Seeley Brook, 500 ft (152 m) west.

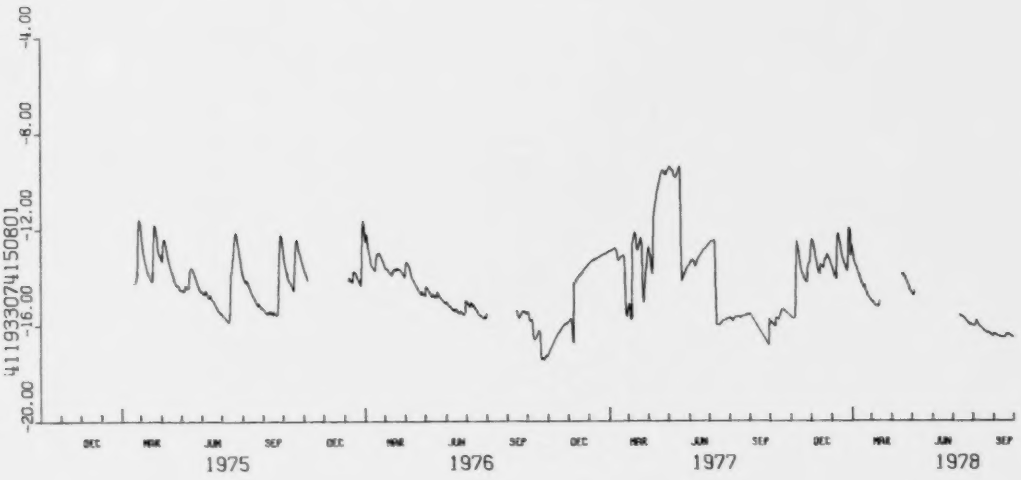
PERIOD OF RECORD.--October 1976 to current year. Unpublished record for September 1964 to June 1974, February 1975 to September 1976 is available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 9.59 ft (2.92 m) below land-surface datum, Apr. 5, 1970; lowest, 17.50 ft (5.33 m) below land-surface datum, Oct. 26, 1976.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15.95	15.67	12.90	13.54	12.87	14.99	---	14.65		---	16.02	16.39
2	15.86	15.69	12.54	13.60	13.05	15.02	---	14.70		---	16.02	16.36
3	15.86	15.71	12.44	13.70	13.20	15.04	---	14.75		---	16.05	16.38
4	15.90	15.72	12.53	13.81	13.34	15.07	---	14.79		---	16.04	16.41
5	15.95	15.72	12.68	13.88	13.44	15.11	---	14.70		---	16.01	16.43
6	15.98	15.73	12.79	13.96	13.51	15.14	---	14.57		---	15.81	16.45
7	16.01	15.72	13.00	14.05	13.57	15.18	---	---		---	15.90	16.47
8	16.04	14.96	13.22	14.09	13.66	15.21	---	---		---	15.92	16.49
9	15.94	13.06	13.32	13.16	13.74	15.22	---	---		---	15.98	16.49
10	15.71	12.51	13.47	12.36	13.82	15.23	---	---		---	16.05	16.51
11	15.69	12.62	13.63	12.18	13.90	15.25	---	---		---	16.09	16.51
12	15.71	12.90	13.75	12.34	13.98	15.25	---	---		15.58	16.11	16.52
13	15.75	13.10	13.84	12.55	14.06	15.20	---	---		15.61	16.11	16.50
14	15.78	13.40	13.87	12.65	14.13	15.00	---	---		15.66	16.14	16.52
15	15.67	13.54	13.59	12.83	14.22	---	---	---		15.64	16.17	16.52
16	15.62	13.71	13.48	13.05	14.29	---	---	---		15.65	16.20	16.52
17	15.52	13.80	13.51	13.20	14.34	---	13.89	---		15.67	16.23	16.53
18	15.42	13.83	13.54	13.26	14.40	---	13.86	---		15.68	16.26	16.53
19	15.39	13.94	13.57	13.36	14.46	---	13.97	---		15.72	16.29	16.44
20	15.36	14.04	13.62	13.42	14.34	---	13.91	---		15.76	16.31	16.38
21	15.34	14.10	13.50	13.49	14.56	---	13.97	---		15.80	16.33	16.40
22	15.36	14.13	13.24	13.60	14.61	---	14.06	---		15.84	16.35	16.42
23	15.41	14.17	13.26	13.69	14.66	---	14.13	---		15.87	16.37	16.38
24	15.44	14.19	13.27	13.76	14.78	---	14.19	---		15.90	16.30	16.38
25	15.48	14.23	13.14	13.76	14.83	---	14.26	---		15.92	16.34	16.42
26	15.50	13.76	13.05	12.98	14.87	---	14.33	---		15.97	16.36	16.45
27	15.51	13.49	13.16	12.02	14.92	---	14.44	---		16.01	16.39	16.46
28	15.54	13.42	13.22	11.93	14.96	---	14.53	---		15.95	16.43	16.48
29	15.57	13.42	13.29	12.14	---	---	14.58	---		15.97	16.45	16.51
30	15.61	13.43	13.37	13.12	---	---	14.61	---		16.01	16.49	16.52
31	15.64	---	13.46	12.64	---	---	---	---		16.03	16.48	---

WTR YEAR 1978 HIGHEST 11.88 Jan. 28, 1978 LOWEST 16.53 Sept. 17, 18, 1978



OTSEGO COUNTY

424136075025101. Local number, Og 23.
LOCATION.--Lat 42°41'36", long 75°02'51", Hydrologic Unit 02050101, near Hartwick.
Owner: Michael Kallan.
AQUIFER.--Till of Pleistocene age.
WELL CHARACTERISTICS.--Dug unused water-table well, diameter 36 in. (0.91 m), depth 15 ft (4.6 m), stone-lined.
DATUM.--Altitude of land-surface datum is 1,430 ft (435 m), from topographic map. Measuring point: Top edge of hole drilled through concrete well cover, at land-surface datum.
PERIOD OF RECORD.--October 1976 to current year. Records for May 1953 to September 1976 are available in files of the Geological Survey.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.98 ft (0.91 m) below land-surface datum, Apr. 2, 1960, Sept. 19, 1977; lowest measured, 12.66 ft (3.86 m) below land-surface datum, Nov. 14, 1964.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02.1977	4.60	JAN 01.1978	5.06	APR 02.1978	4.72	JUL 02.1978	6.99
09	4.92	08	5.10	09	4.64	09	7.72
16	4.67	15	5.44	16	4.75	16	8.40
23	4.63	22	5.70	23	5.04	23	8.97
30	4.86	29	5.28	30	5.10	30	8.95
NOV 06	4.92	FEB 05	5.80	MAY 07	5.39	AUG 06	8.10
13	3.98	12	5.90	14	5.70	13	7.79
20	3.40	19	6.10	21	5.64	20	8.00
27	3.92	26	6.22	28	6.01	27	8.12
DEC 04	4.50	MAR 05	6.39	JUN 04	6.24	SEP 03	7.97
11	4.90	12	6.24	11	6.40	10	8.06
18	4.65	19	5.62	18	6.07	17	8.00
25	4.64	26	4.99	25	6.20	24	7.80

PUTNAM COUNTY

412450073413101. Local number, P 609.
LOCATION.--Lat 41°24'50", long 73°41'31", Hydrologic Unit 02030101, near Carmel.
Owner: New York City Board of Water Supply.
AQUIFER.--Glacial till of Pleistocene age.
WELL CHARACTERISTICS.--Dug unused water-table well, diameter 36 in. (0.91 m), depth 17 ft (5.2 m), stone-lined.
DATUM.--Altitude of land-surface datum is 540 ft (165 m), from topographic map. Measuring point: Top (North side) of 3-in. (0.08-m) coupling set in concrete well cover, at land-surface datum.
PERIOD OF RECORD.--October 1976 to current year. Unpublished record for January 1935 to September 1945, September 1950 to September 1976 is available in files of the Geological Survey.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.0 ft (0.30 m) below land-surface datum, Oct. 19, 1955; lowest measured, dry (several times).

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01.1977	13.30	JAN 07.1978	6.35	APR 15.1978	5.20	JUL 16.1978	11.70
08	12.65	12	4.60	22	5.90	23	11.70
15	10.70	21	5.80	29	6.90	30	11.90
29	9.90	28	3.30	MAY 06	8.00	AUG 05	12.70
NOV 05	10.50	FEB 05	4.65	13	8.40	12	12.20
11	8.35	12	5.20	20	4.75	19	12.65
19	7.70	18	6.40	27	4.00	SEP 09	13.80
25	7.75	25	8.00	JUN 03	5.05	17	14.30
DEC 03	5.60	MAR 11	8.40	10	6.10	23	14.60
10	5.40	18	7.70	17	7.70	30	14.60
17	5.10	24	5.50	24	9.05		
23	5.00	APR 01	2.90	JUL 02	10.30		
31	5.10	09	4.25	08	10.90		

RENSSELAER COUNTY

423834073391001. Local number, Re 700.
LOCATION.--Lat 42°38'34", long 73°39'10", Hydrologic Unit 02020006, near Defreestville.
Owner: William P. Hofmann.
AQUIFER.--Sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Dug domestic water-table well, diameter 4 ft (1.2 m), depth 16 ft (4.9 m), stone-lined.
DATUM.--Altitude of land-surface datum is 405 ft (123 m), from topographic map. Measuring point: Top edge of concrete curbing at midpoint of north side of rectangular opening, 2.00 ft (0.609 m) above land-surface datum.
PERIOD OF RECORD.--September 1954 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured 8.92 ft (2.72 m) below land-surface datum, Apr. 4, 1970; lowest measured 15.49 ft (4.72 m) below land-surface datum, Oct. 3, 1964.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01,1977	12.69	JAN 07,1978	10.02	APR 17,1978	10.12	JUL 22,1978	13.15
08	12.64	14	9.40	22	10.19	29	13.32
15	12.32	22	9.86	29	10.47	AUG 05	13.40
22	10.82	28	9.24	MAY 06	10.94	12	13.50
29	10.85	FEB 05	9.86	13	10.89	19	13.70
NOV 06	11.06	12	10.18	20	10.95	26	13.84
12	10.43	19	10.50	28	11.54	SEP 03	14.25
19	10.53	26	11.15	JUN 03	11.80	09	14.04
26	10.17	MAR 05	11.29	11	11.77	16	14.06
DEC 03	9.69	12	11.50	17	12.05	23	14.25
10	10.16	18	10.72	24	12.20	30	14.30
17	9.56	25	10.28	JUL 01	12.50		
25	9.82	APR 02	9.86	08	12.80		
31	9.54	08	9.91	15	12.95		

423532073423701. Local number, Re 701.
LOCATION.--Lat 42°35'32", long 73°42'37", Hydrologic Unit 02020006, near East Greenbush.
Owner: Town of East Greenbush.
AQUIFER.--Sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 8 in. (0.20 m) to 12 in. (0.30 m), depth 96 ft (29.3 m), slotted 82 ft (25.0 m) to 96 ft (29.3 m).
DATUM.--Altitude of land-surface datum is 255 ft (78 m), from topographic map. Measuring point: Top of flange, 3.35 ft (1.021 m) above land-surface datum.
PERIOD OF RECORD.--October 1976 to current year. Unpublished record for March 1961 to September 1976 is available in files of the Geological Survey.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 19.72 ft (6.01 m) below land-surface datum, May 25, 1976; lowest, 31.59 ft (9.63 m) below land-surface datum, Mar. 2, 1966.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
HIGHEST FOR THE DAY (FROM RECORDER GRAPH)

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 05,1977	23.04	DEC 10,1977	22.71	MAY 15,1978	20.52	AUG 10,1978	22.03
10	23.06	31	22.34	20	20.52	15	22.13
15	23.06	JAN 05,1978	22.32	25	20.59	20	22.24
20	23.02	10	22.00	31	20.66	25	22.35
25	22.97	15	21.81	JUN 05	20.77	31	22.48
31	23.08	20	21.72	10	20.87	SEP 05	22.55
NOV 05	23.15	25	21.63	15	20.97	10	22.68
10	22.91	31	21.42	20	21.03	15	22.76
15	22.87	APR 20	20.30	25	21.10	20	22.85
20	22.93	25	20.39	30	21.18	25	22.94
25	22.82	30	20.37	JUL 05	21.29	30	23.05
30	22.85	MAY 05	20.44	10	21.39		
DEC 05	22.67	10	20.46	AUG 05	21.98		

WTR YEAR 1978 HIGHEST 20.30 Apr. 20, 1978 LOWEST 23.17 Nov. 7, 1977

RENSSELAER COUNTY

423225073430501. Local number, Re 702.
LOCATION.--Lat 42°32'25", long 73°43'05", Hydrologic Unit 02020006, near Brookview.
Owner: Nicholas J. Bult.
AQUIFER.--Sand of Pleistocene age.
WELL CHARACTERISTICS.--Bored observation water-table well, diameter 2.5 in. (0.06 m), depth 16 ft (4.9 m), cased to 13 ft (4.0 m), 1.5-in. (0.04-m) well point (60-gauze screen 13 ft or 4.0 m to 16 ft or 4.9 m).
DATUM.--Altitude of land-surface datum is 175 ft (53 m), from topographic map. Measuring point: Top of casing, 2.40 ft (0.732 m) above land-surface datum.
PERIOD OF RECORD.--October 1977 to current year. Unpublished record for November 1965 to September 1977 is available in files of the Geological Survey.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.03 ft (0.01 m) above land-surface datum, November 29, 1972; lowest measured, 6.42 ft (1.96 m) below land-surface datum, September 22, 1970.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 07.1977	2.44	DEC 29.1977	1.20	MAY 16.1978	1.61	AUG 30.1978	5.15
21	0.44	FEB 24.1978	2.08	JUN 12	3.32	SEP 27	5.12
NOV 03	1.96	MAR 23	1.34	JUL 11	4.36		
DEC 16	0.78	APR 18	1.96	AUG 02	5.10		

ROCKLAND COUNTY

411802073593001. Local number, Ro 18.
LOCATION.--Lat 41°18'02", long 73°59'30", Hydrologic Unit 02030101, in Bear Mountain section near Lemon Road and Seven Lakes Drive.
Owner: Palisades Interstate Park Commission.
AQUIFER.--Storm King Granite of Precambrian age.
WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 6 in. (0.15 m), depth 60 ft (18.3 m), cased to 53 ft (16.2 m), open hole.
DATUM.--Altitude of land-surface datum is 390 ft (119 m), from topographic map. Measuring point: Top of casing, 3.65 ft (1.112 m) above land-surface datum.
PERIOD OF RECORD.--July 1949 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured 10.55 ft (3.22 m) below land-surface datum, Mar. 3, 1961; lowest measured 28.16 ft (8.58 m) below land-surface datum, Nov. 29, 1964.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM. WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02.1977	23.00	DEC 11.1977	13.36	MAR 10.1978	16.27	JUN 18.1978	15.25
10	22.25	18	13.80	17	14.90	JUL 02	16.72
16	21.51	26	12.39	APR 02	11.64	09	17.23
23	20.78	JAN 08.1978	14.52	09	13.89	AUG 01	19.38
NOV 06	20.19	23	14.19	30	15.71	20	20.85
13	13.34	30	12.54	MAY 21	12.43	27	21.52
20	13.60	FEB 05	14.22	JUN 04	11.98	SEP 25	24.12
DEC 04	11.55	21	15.75	11	14.40		

ST. LAWRENCE COUNTY

444904074455201. Local number, St 40.
LOCATION.--Lat 44°49'04", long 74°45'52", Hydrologic Unit 04150306, near Brasher Falls.
Owner: State Department of Environmental Conservation.
AQUIFER.--Glacial sand of Pleistocene age.
WELL CHARACTERISTICS.--Dug unused water-table well, diameter 36 in (0.91 m), depth 12 ft (3.7 m), concrete cased to 12 ft (3.7 m), open end.
DATUM.--Altitude of land-surface datum is 300 ft (91 m), from topographic map. Measuring point: Chisled mark on top edge of 6-in. (0.15-m) by 8-in. (0.20-m) opening of concrete well cover, 0.70 ft (0.213 m) above land-surface datum.
PERIOD OF RECORD.--May 1953 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured 3.24 ft (0.99 m) below land-surface datum, Apr. 21, 1971; lowest measured 9.38 ft (2.86 m) below land-surface datum, Oct. 24, 1964.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 09,1977	5.52	JAN 06,1978	5.52	APR 08,1978	4.23	JUL 08,1978	6.22
14	5.45	13	5.10	15	3.72	15	6.68
21	5.00	21	5.34	21	3.74	21	6.92
29	5.35	28	5.07	29	4.33	28	7.13
NOV 04	5.46	FEB 03	5.28	MAY 05	4.75	AUG 04	7.32
11	5.16	11	5.42	12	4.82	11	7.47
18	5.08	18	5.56	20	4.94	18	7.60
25	5.19	25	5.65	26	5.14	26	7.66
DEC 02	5.06	MAR 03	5.67	JUN 02	5.40	SEP 01	7.70
10	5.24	10	5.72	09	5.52	08	7.86
17	5.33	17	5.32	16	5.70	16	7.92
23	5.39	25	5.13	24	5.64	22	8.00
31	5.42	31	4.83	30	5.79	30	8.16

SARATOGA COUNTY

430327073475401. Local number, Sa 529.
LOCATION.--Lat 43°03'27", long 73°47'54", Hydrologic Unit 02020003, at Saratoga Springs.
Owner: Saratoga Springs Authority, New York State.
AQUIFER.--Dolomite of Ordovician age.
WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 6 in. (0.15 m), depth 304 ft (92.6 m), cased to 189 ft (57.6 m), open hole.
DATUM.--Altitude of land-surface datum is 305 ft (93 m), from topographic map. Measuring point: Top of casing, 3.38 ft (1.028 m) above land-surface datum.
REMARKS.--Water level affected by earthquakes and distant pumping.
PERIOD OF RECORD.--October 1976 to current year. Unpublished record for May 1949 to November 1961, August 1964 to September 1976 is available in files of the Geological Survey.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 41.28 ft (12.58 m) below land-surface datum, Jan. 27, 1978; lowest, 56.20 ft (17.13 m) below land-surface datum, July 29, 1949.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
WEEKLY HIGHEST (FROM RECORDER)

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03,1977	43.23	JAN 09,1978	41.60	APR 11,1978	41.48	JUL 05,1978	45.24
09	43.23	18	42.13	20	41.63	11	46.47
17	42.83	27	41.28	24	41.73	12	46.00
28	43.53	FEB 07	41.95	30	41.92	19	46.78
NOV 07	43.25	14	42.04	MAY 08	41.69	26	47.17
16	43.17	22	41.92	15	41.86	30	47.83
25	42.43	MAR 01	42.12	21	41.81	AUG 04	47.35
DEC 01	42.60	06	42.47	30	42.13	19	46.29
06	42.49	10	42.32	JUN 05	42.35	24	46.12
13	42.64	15	41.96	12	43.04	31	45.48
20	42.49	20	42.09	13	43.04	SEP 08	44.66
23	42.07	23	42.29	19	43.57	14	44.49
JAN 02,1978	41.97	28	41.53	26	43.95	23	44.53
08	41.60	APR 05	41.56	30	44.66	29	44.92

WTR YEAR 1978 HIGHEST 41.28 Jan. 27, 1978 LOWEST 48.26 Aug. 1, 1978

SARATOCA COUNTY

430013073370401. Local number, Sa 1072.

LOCATION.--Lat 43°00'13", long 73°37'04", Hydrologic Unit 02020003, near Stillwater.
Owner: U.S. National Park Service.

AQUIFER.--Sand of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in. (0.15 m), depth 24 ft (7.3 m), cased to 21 ft (6.4 m), 2-in. (0.05-m) well point (30-gauze screen 21 ft or 6.4 m to 24 ft or 7.3 m).

DATUM.--Altitude of land-surface datum is 224 ft (68 m), from topographic map. Measuring point: Top of casing, 3.31 ft (1.007 m) above land-surface datum.

REMARKS.--Water level affected by nearby pumping.

PERIOD OF RECORD.--October 1976 to current year. Unpublished record for July 1959 to September 1976 is available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.94 ft (1.20 m) below land-surface datum, May 25, 1976; lowest, 11.91 ft (3.63 m) below land-surface datum, Oct. 8, 1965.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
HIGHEST FOR THE DAY (FROM RECORDER)

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 05,1977	7.81	DEC 25,1977	6.54	APR 30,1978	6.75	JUL 20,1978	7.97
10	7.71	29	6.49	MAY 05	6.81	25	8.11
15	7.62	FEB 01,1978	5.75 S	10	6.90	31	8.23
20	7.30	MAR 01	6.80	15	6.93	AUG 05	8.27
25	7.07	05	6.91	20	6.81	10	8.34
31	7.07	10	7.07	25	7.01	15	8.39
NOV 05	7.17	15	6.81	31	7.14	20	8.44
10	7.18	20	6.96	JUN 05	7.07	25	8.53
15	7.26	23	6.83	10	7.08	31	8.57
20	7.29	29	6.39	15	7.15	SEP 05	8.72
25	7.26	APR 01	6.46	20	7.17	10	8.75
30	7.10	05	6.44	25	7.41	15	8.79
DEC 05	6.87	11	6.43	30	7.54	20	8.83
10	6.81	16	6.44	JUL 05	7.68	25	8.88
15	6.77	20	6.42	10	7.80	30	8.93
20	6.66	24	6.47	15	7.88		

WTR YEAR 1978 HIGHEST MEASURED 5.75 Feb. 1, 1978 LOWEST 9.09 Sept. 30, 1978

S Steel tape measurement.

SCHENECTADY COUNTY

424910073591401. Local number, Sn 363.

LOCATION.--Lat 42°49'10", long 73°59'14", Hydrologic Unit 02020004, in Schenectady.
Owner: City of Schenectady.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in. (0.15 m), depth 54 ft (16.4 m), filled in from original depth of 57 ft (17.4 m), cased to 57 ft (17.4 m), open end.

DATUM.--Land-surface datum is 228.50 ft (69.647 m) National Geodetic Vertical Datum of 1929. Measuring point: Top of shelter platform, 2.55 ft (0.777 m) above land-surface datum.

REMARKS.--Water level affected by stage of Mohawk River, and by pumping (average 16.8 mgal/d or 63,600 m^3/d in 1978) from municipal well field.

PERIOD OF RECORD.--June 1960 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.62 ft (1.10 m) below land-surface datum, Dec. 27, 1973; lowest, 31.27 ft (9.53 m) below land-surface datum, Feb. 10, 1966.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
HIGHEST FOR THE DAY (FROM RECORDER GRAPH)

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 05,1977	15.90	JAN 10,1978	8.62	APR 25,1978	20.20	JUL 15,1978	21.71
10	16.73	20	16.98	30	20.57	20	20.90
15	17.91	25	17.36	MAY 05	21.66	25	22.03
25	17.08	FEB 15	18.82	10	20.23	31	20.20 S
31	19.10	20	19.40	15	20.99 S	AUG 05	20.10
NOV 05	19.60	25	20.78	25	20.94	10	19.64
10	12.54	28	21.20	31	23.04	15	21.00 E
20	17.89	MAR 05	21.45	JUN 05	21.60	20	21.38
25	17.48	15	22.09	10	19.60	25	20.00
30	18.30	20	19.85	15	19.56	31	20.69
DEC 05	16.98	25	13.05	20	20.09	SEP 05	20.07
10	17.96	31	13.18	25	20.90	15	19.21
20	16.46	APR 05	16.43	30	20.45 S	20	18.99
31	18.66	10	17.20	JUL 05	20.91	25	19.40
JAN 05,1978	19.52	15	16.97	10	22.24	30	19.86

WTR YEAR 1978 HIGHEST 8.58 Jan. 11, 1978 LOWEST 23.61 May 31, 1978

E Estimated.

S Steel tape measurement.

STEUBEN COUNTY

423121077281201. Local number, Sb 471.
LOCATION.--Lat 42°31'21", long 77°28'12", Hydrologic Unit 02050105, near Cohocton.
Owner: Myron Crouch.
AQUIFER.--Glacial sand of Pleistocene age.
WELL CHARACTERISTICS.--Bored observation water-table well, diameter 2.5 in. (0.06 m), depth 24 ft (7.3 m), filled in from original depth of 25 ft (7.6 m), cased to 24 ft (7.3 m), 1.25-in. (0.03-m) well point (60-gauze screen 24 ft or 7.3 m to 25 ft or 7.6 m, damaged during well installation).
DATUM.--Altitude of land-surface datum is 1,315 ft (401 m), from topographic map. Measuring point: Top of casing, 3.10 ft (0.945 m) above land-surface datum.
PERIOD OF RECORD.--October 1976 to current year. Unpublished record for October 1965 to September 1976 is available in files of the Geological Survey.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.46 ft (0.14 m) below land-surface datum, June 26, 1972; lowest measured, 17.50 ft (5.33 m) below land-surface datum, Oct. 28, 1965.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02.1977	7.22	JAN 01.1978	8.06	MAY 06.1978	9.06	JUL 30.1978	13.25
09	8.28	15	8.17	14	9.57	AUG 13	13.65
16	8.90	29	8.03	21	9.55	27	14.09
30	9.52	MAR 12	11.62	28	10.05	SEP 03	14.32
NOV 06	10.18	19	9.64	JUN 04	10.71	10	14.45
13	8.17	26	5.45	11	11.24	17	14.62
20	8.34	APR 02	5.09	25	11.82	24	14.65
DEC 04	9.39	09	3.89	JUL 02	12.14		
18	7.80	16	6.12	09	12.47		
25	7.24	23	7.33	23	13.02		

422445077203301. Local number, Sb 472.
LOCATION.--Lat 42°24'45", long 77°20'33", Hydrologic Unit 02050105, near Kanona.
Owner: David Owens.
AQUIFER.--Glacial gravel of Pleistocene age.
WELL CHARACTERISTICS.--Bored observation water-table well, diameter 2.5 in. (0.06 m), depth 17 ft (5.2 m), filled in from original depth of 18 ft (5.5 m), cased to 16 ft (4.9 m), 1.25-in. (0.03-m) well point (60-gauze screen 16 ft or 4.9 m to 18 ft or 5.5 m, damaged during well installation).
DATUM.--Altitude of land-surface datum is 1,220 ft (372 m), from topographic map. Measuring point: Top of casing, 3.00 ft (0.914 m) above land-surface datum.
PERIOD OF RECORD.--October 1976 to current year. Unpublished record for November 1965 to September 1976 is available in files of the Geological Survey.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.64 ft (1.11 m) below land-surface datum, June 25, 1972; lowest measured, 10.84 ft (3.30 m) below land-surface datum, Sept. 22, 1966.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02.1977	5.00	JAN 01.1978	6.54	APR 09.1978	4.36	JUL 16.1978	9.74
09	6.44	08	7.07	16	5.28	23	9.80
16	6.92	15	7.09	30	7.10	30	9.97
23	7.23	29	6.70	MAY 07	7.79	AUG 06	10.00
30	7.09	FEB 05	6.73	14	8.22	13	8.91
NOV 06	8.34	12	7.38	21	7.85	20	9.34
13	8.47	19	7.35	28	7.86	27	9.66
20	6.12	26	8.58	JUN 04	7.95	SEP 03	9.90
27	6.75	MAR 05	9.00	11	8.15	10	10.06
DEC 04	7.14	12	9.24	18	8.59	17	10.20
11	7.03	19	7.65	25	8.92	24	10.17
18	6.75	26	4.80	JUL 02	9.32		
24	6.78	APR 02	4.39	09	9.53		

ULSTER COUNTY

414425074213601. Local number, U 204.
LOCATION.--Lat 41°44'25", long 74°21'36", Hydrologic Unit 02020007, near Napanoch.
Owner: State Department of Correction.
AQUIFER.--Till.
WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 8 in. (0.20 m), depth 46 ft (14.0 m), filled in from original depth of 67 ft (20.4 m).
DATUM.--Altitude of land-surface datum is 300 ft (91 m), from topographic map. Measuring point: Top of casing, 1.00 ft (0.305 m) above land-surface datum.
PERIOD OF RECORD.--October 1976 to current year. Unpublished record for October 1954 to September 1976 is available in files of the Geological Survey.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 16.84 ft (5.13 m) below land-surface datum, Mar. 24, 1955; lowest measured, 26.90 ft (8.20 m) below land-surface datum, Dec. 29, 1964.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 11,1977	23.46	JAN 10,1978	20.43	APR 11,1978	19.58	JUL 11,1978	20.17
18	23.24	17	20.21	18	19.56	18	20.32
25	22.93	24	20.18	25	19.56	25	20.52
NOV 01	22.77	31	20.15	MAY 02	19.65	AUG 01	20.17
08	22.62	FEB 07	19.83	09	19.67	08	20.99
15	22.36	14	19.81	16	19.70	15	21.22
22	21.89	21	19.82	23	19.62	22	21.48
29	21.60	28	19.88	31	19.59	29	21.79
DEC 06	21.31	MAR 07	19.96	JUN 07	19.62	SEP 05	22.01
13	21.13	14	20.06	13	19.78	12	22.36
20	20.88	21	20.17	20	19.78	19	22.53
27	20.79	28	19.91	27	19.91	27	22.81
JAN 03,1978	20.63	APR 04	19.69	JUL 04	20.08		

414948074035101. Local number, U 405.
LOCATION.--Lat 41°49'48", long 74°03'51", Hydrologic Unit 02020007, Grist Mill Road, Tillson.
Owner: City School District of Kingston.
AQUIFER.--Sand of Pleistocene age.
WELL CHARACTERISTICS.--Bored observation water-table well, diameter 2.5 in. (0.06 m), depth 36 ft (11.0 m), cased to 34 ft (10.4 m), 2-in. (0.05-m) well point (60-gauze screen 34 ft or 10.4 m to 36 ft or 11.0 m).
DATUM.--Altitude of land-surface datum is 240 ft (73 m), from topographic map. Measuring point: Top of casing, 0.47 ft (0.143 m) above land-surface datum.
REMARKS.--Originally a dug well, diameter 36 in. (0.91 m), depth 21 ft (6.4 m), stone-lined. Well deepened by power auger, October 1965.
PERIOD OF RECORD.--October 1976 to current year. Unpublished record for October 1964 to July 1965, March 1966 to December 1974, April 1976 to September 1976 is available in files of the Geological Survey.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 14.43 ft (4.40 m) below land-surface datum, June 3, 1978; lowest measured, 20.71 ft (6.31 m) below land-surface datum, Jan. 24, 1967.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 07,1977	17.41	MAR 08,1978	16.21	JUN 10,1978	14.45	AUG 22,1978	16.14
14	17.42	APR 12	14.62	17	14.63	26	16.22
21	16.43	22	14.64	24	14.75	SEP 02	16.33
29	17.38	29	14.81	JUL 01	14.89	06	16.43
NOV 04	17.38	MAY 06	14.96	08	15.05	09	16.48
11	16.45	13	15.04	15	15.22	16	16.63
19	16.41	20	14.72	22	15.41	23	16.71
28	15.43	27	14.47	29	15.57	26	16.75
DEC 14	16.34	JUN 02	14.46	AUG 12	15.87	30	16.83
JAN 24,1978	15.75	03	14.43	19	16.05		

WASHINGTON COUNTY

431026073194101. Local number, W 264.
LOCATION.--Lat 43°10'26", long 73°19'41", Hydrologic Unit 02020003, in Salem.
Owner: Village of Salem.
AQUIFER.--Glacial gravel of Pleistocene age.
WELL CHARACTERISTICS.--Dug fire-protection water-table well, approximate size 8 ft (2.4 m) by 12 ft (3.7 m), depth 15 ft (4.6 m), stone-lined.
DATUM.--Land-surface datum is 485.5 ft (147.98 m) National Geodetic Vertical Datum of 1929. Measuring point: Top edge of concrete cover at north side of square opening, at land-surface datum.
REMARKS.--Water level affected by floods of nearby stream.
PERIOD OF RECORD.--July 1946 to December 1973, October 1975 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured 6.62 ft (2.02 m) below land-surface datum, Apr. 4, 1960; lowest measured 11.70 ft (3.57 m) below land-surface datum, Oct. 12, 1964.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 21•1977	8.03	JAN 23•1978	9.15	APR 25•1978	8.95	JUL 24•1978	10.12
DEC 01	8.70	FEB 24	9.78	MAY 22	9.97	AUG 23	9.90
24	8.70	MAR 23	9.55	JUN 25	9.44	SEP 22	9.84

431030073192101. Local number, W 533.
LOCATION.--Lat 43°10'30", long 73°19'21", Hydrologic Unit 02020003, in Salem.
Owner: Salem Central High School.
AQUIFER.--Sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in. (0.15 m), depth 15 ft (4.6 m), cased to 16 ft (4.9 m), open end. Well backfilled 1.6 ft (0.48 m) with coarse gravel.
DATUM.--Altitude of land-surface datum is 490 ft (149 m), from topographic map. Measuring point: Top of casing, 3.10 ft (0.945 m) above land-surface datum.
REMARKS.--This well drilled March 1974 as a replacement for 431032073192401 (local number W 532), located 350 ft (107 m) northwest, which has a period of record from October 1965 to June 1973 (unpublished).
PERIOD OF RECORD.--October 1976 to current year. Unpublished record for March 1974 to September 1976 is available in files of the Geological Survey.
EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 3.99 ft (1.22 m) below land-surface datum, Jan. 29, 1976; lowest recorded, 7.36 ft (2.24 m) below land-surface datum, Sept. 14, 1977.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
HIGHEST FOR THE DAY (FROM RECORDER)

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 25•1977	5.25	JAN 31•1978	5.50	MAY 20•1978	6.73	AUG 05•1978	7.13
30	5.69	MAR 10	7.11	25	6.81	10	7.05
NOV 05	6.12	15	6.58	31	6.94	15	6.87
09	6.27	20	6.64	JUN 05	6.81	20	6.94
14	6.32	25	6.28	10	6.20	25	7.01
20	5.86	31	5.56	15	6.18	31	7.10
24	5.86	APR 05	5.50	20	6.36	SEP 05	7.18
DEC 20	5.35	10	5.56	25	6.57	10	7.25
25	5.36	15	5.51	30	6.78	15	6.99
31	5.48	20	5.74	JUL 05	6.98	20	7.01
JAN 05•1978	5.08	25	5.88	10	7.12	25	6.98
10	5.51	30	6.12	15	7.23	30	7.05
15	5.30	MAY 05	6.36	20	7.15		
20	5.01	10	6.53	25	7.26		
25	4.79	15	6.64	31	7.24		

WTR YEAR 1978 HIGHEST 4.79 Jan. 25, 1978 LOWEST 7.31 Aug. 3, 1978

WESTCHESTER COUNTY

411421073481201. Local number, We 3.
LOCATION.--Lat 41°14'21", long 73°48'12", Hydrologic Unit 02030101, near Yorktown Heights.
Owner: New York City Board of Water Supply.
AQUIFER.--Glacial sand of Pleistocene age.
WELL CHARACTERISTICS.--Dug unused water-table well, diameter 36 in. (0.91 m), depth 15.3 ft (4.66 m) in November 1978, original depth reported to be 18.2 ft (5.55 m), filled in to 17.1 ft (5.21 m) as of November 1956, to 16.3 ft (4.97 m) as of June 1971, to 15.5 ft (4.72 m) as of October 1977, stone lined.
DATUM.--Altitude of land-surface datum is 252.5 ft (76.96 m) National Geodetic Vertical Datum of 1929. Measuring point: Top edge of hole in wooden well cover, 1.13 ft (0.34 m) above land-surface datum (since June 15, 1972).
REMARKS.--Digital recorder installed Aug. 25, 1977.
PERIOD OF RECORD.--October 1976 to current year. Unpublished record for April 1934 to September 1937, April 1938 to September 1945, March 1951 to September 1976 are available in files of the Geological Survey.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.9 ft (1.19 m) below land-surface datum, Apr. 12, 13, 1958; lowest measured, dry Nov. 30, 1935, Jan. 7, 1936, Feb. 1, 1936, Jan. 6 to Feb. 4, 1965, Nov. 12, 1970, Sept. 10 to Nov. 9, 1977.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN FOR THE DAY (FROM DIGITAL RECORDER)

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 05.1977	DRY	DEC 25.1977	9.10	APR 15.1978	8.70	JUL 31.1978	13.08
10	DRY	31	8.61	20	9.14	AUG 05	13.35
15	DRY	JAN 05.1978	8.71	25	9.47	10	13.51
20	DRY	FEB 25	9.24	MAY 31	6.43	15	13.61
25	DRY	28	9.58	JUN 05	6.91	20	13.53
NOV 15	10.65	MAR 05	9.95	10	7.30	25	13.60
20	10.75	10	10.25	JUL 03	10.92	31	13.79
25	10.76	15	10.34	05	11.12	SEP 05	13.99
30	10.57	20	9.77	10	11.57	10	14.21
DEC 05	9.71	25	8.86	15	11.91	15	14.38
10	9.39	31	7.22	20	12.33	20	14.53
15	9.42	APR 05	7.35	25	12.69	25	14.65
20	9.55	10	8.06			30	14.77

WTR YEAR 1978 HIGHEST 6.21 May 28, 1978 LOWEST DRY Oct. 1-Nov. 9, 1977

WYOMING COUNTY

423739077595501. Local number, Wo 1.
LOCATION.--Lat 42°37'39", long 77°59'55", Hydrologic Unit 04130002, Letchworth State Park, near Castile.
Owner: State Department of Environmental Conservation.
AQUIFER.--Glacial till of Pleistocene age.
WELL CHARACTERISTICS.--Dug unused water-table well, diameter 2 in. (0.05 m), depth 14 ft (4.3 m), well point (60-gauze screen 12 ft or 3.7 m to 14 ft or 4.3 m).
DATUM.--Altitude of land-surface datum is 1,020 ft (311 m), from topographic map. Measuring point: Top of 2-in. (0.05-m) by 1-in. (0.02-m) reducing coupling, 3.33 ft (1.015 m) above land-surface datum.
PERIOD OF RECORD.--November 1942 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.5 ft (0.15 m) below land-surface datum, Apr. 5, 1947; lowest measured, dry, Dec. 6-27, 1964, Jan. 2, 1965.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 11.1977	2.18	JAN 23.1978	3.18	APR 15.1978	2.65	JUL 25.1978	9.85
NOV 14	1.87	FEB 14	2.95	MAY 21	2.09	AUG 20	10.93
DEC 11	2.65	MAR 18	1.49	JUN 19	7.43	SEP 24	12.22

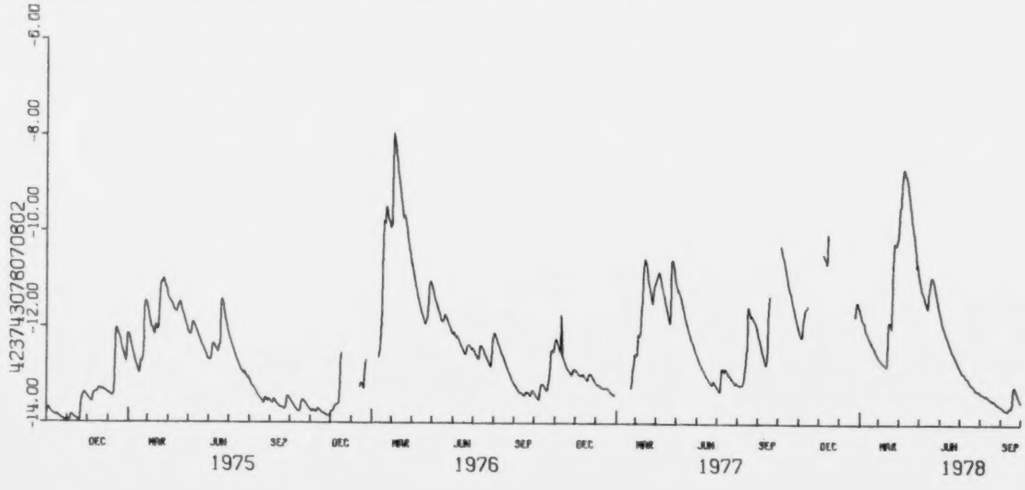
WYOMING COUNTY

423743078070802. Local number, Wo 4.
LOCATION.--Lat 42°37'43", long 78°07'08", Hydrologic Unit 04130002, near Gainesville.
Owner: Letchworth Central School.
AQUIFER.--Sand of Pleistocene age.
WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in. (0.15 m), depth 20 ft (6.1 m), cased to 20 ft (6.1 m), open end.
DATUM.--Altitude of land-surface datum is 1,610 ft (491 m), from topographic map. Measuring point: Top of casing, 2.60 ft (0.792 m) above land-surface datum.
REMARKS.--This well drilled May 1974 as a replacement for 423743078070801 (local number Wo 2), located 25 ft (7.6 m) southeast, which has a period of record from November 1965 to May 1974 (unpublished).
PERIOD OF RECORD.--October 1976 to current year. Unpublished record for May 1974 to September 1976 is available in files of the Geological Survey.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 7.89 ft (2.40 m) below land-surface datum, Mar. 5, 1976; lowest, 14.00 ft (4.27 m) below land-surface datum, Nov. 3, 1974.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	12.03	---	---	11.65	12.61	9.74	10.93	11.69	12.83	13.34	13.62
2	---	12.08	---	---	11.71	12.64	9.47	11.02	11.75	12.86	13.35	13.63
3	---	12.13	---	---	11.77	12.65	9.47	11.09	11.82	12.89	13.36	13.64
4	---	12.17	---	---	11.81	12.67	9.39	11.18	11.88	12.91	13.36	13.65
5	---	12.19	---	---	11.85	12.69	8.99	11.23	11.94	12.93	13.36	13.67
6	10.29	12.21	---	---	11.87	12.71	8.88	11.25	11.98	12.94	13.37	13.68
7	10.38	12.17	---	---	11.87	12.72	8.72	11.29	12.02	12.94	13.39	13.69
8	10.48	11.92	10.46	---	11.94	12.73	8.66	11.35	12.06	12.96	13.40	13.69
9	10.53	11.79	10.48	---	12.05	12.74	8.74	11.41	12.10	12.99	13.41	13.70
10	10.56	11.74	10.54	---	12.07	12.75	8.79	11.45	12.14	13.02	13.38	13.70
11	10.62	11.65	10.55	---	12.10	12.77	8.81	11.48	12.18	13.03	13.39	13.71
12	10.71	11.61	10.59	---	12.14	12.79	8.87	11.52	12.21	13.03	13.41	13.69
13	10.81	11.59	10.66	---	12.17	12.80	8.94	11.58	12.25	13.05	13.42	13.65
14	10.89	11.58	10.53	---	12.20	12.70	9.05	11.52	12.29	13.08	13.44	13.64
15	10.97	---	10.03	---	12.23	12.18	9.16	11.31	12.33	13.11	13.46	13.65
16	11.07	---	---	---	12.26	11.94	9.27	11.22	12.37	13.13	13.46	13.65
17	11.15	---	---	---	12.29	11.86	9.40	11.14	12.40	13.16	13.47	13.62
18	11.19	---	---	---	12.31	11.88	9.54	11.03	12.45	13.18	13.48	13.55
19	11.24	---	---	---	12.34	11.94	9.67	10.93	12.48	13.18	13.49	13.34
20	11.28	---	---	---	12.37	12.00	9.78	10.92	12.50	13.18	13.50	13.22
21	11.34	---	---	---	12.39	11.84	9.87	10.93	12.53	13.20	13.50	13.20
22	11.41	---	---	---	12.41	11.14	9.97	10.98	12.56	13.22	13.50	13.24
23	11.48	---	---	---	12.45	10.68	10.07	11.04	12.59	13.25	13.52	13.28
24	11.55	---	---	---	12.48	10.26	10.18	11.11	12.61	13.27	13.54	13.33
25	11.61	---	---	11.76	12.51	10.21	10.32	11.18	12.65	13.28	13.55	13.37
26	11.67	---	---	11.62	12.54	10.25	10.44	11.27	12.68	13.29	13.57	13.40
27	11.73	---	---	11.46	12.58	10.26	10.72	11.35	12.71	13.29	13.58	13.43
28	11.80	---	---	11.45	12.60	10.25	10.64	11.42	12.75	13.29	13.59	13.47
29	11.86	---	---	11.50	---	10.15	10.74	11.50	12.77	13.30	13.59	13.50
30	11.92	---	---	11.55	---	10.15	10.84	11.56	12.80	13.30	13.60	13.53
31	11.97	---	---	11.58	---	10.09	---	11.62	---	13.32	13.61	---

WTR YEAR 1978 HIGHEST 8.62 Apr. 7, 1978 LOWEST 13.71 Sept. 11, 1978



WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SAMPLING DEPTH (FT)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)
CATTARAUGUS COUNTY												
421021078001201 - RAMSEY WELL COLUMBIA GAS (LAT 42 10 21 LONG 078 00 12.01)												
MAR , 1978												
16...	1500	--	--	3.5	--	130000	130000	44000	5400	63000	2200	0
CHAUTAUQUA COUNTY												
422134079200701 - WELL NO 56 PARAGON RESOURCE (LAT 42 21 34 LONG 079 20 07.01)												
MAY , 1978												
04...	1300	2960	--	5.8	11.0	170000	--	26000	26000	5100	1100	--
422227079190001 - WELL NO 9 PARAGON RESOURCE (LAT 42 22 27 LONG 079 19 00.01)												
MAY , 1978												
04...	1230	2745	--	6.8	15.0	180000	--	28000	26000	5800	1200	--
422734079182201 - GEYBEN WELL J AND L WELL SERVICES (LAT 42 27 34 LONG 079 18 22.01)												
MAY , 1978												
05...	1100	1900	--	6.4	11.0	220000	--	32000	34000	6800	1300	--
422743079180001 - DACH WELL J AND L WELL SERVICES (LAT 42 27 43 LONG 079 18 00.01)												
MAY , 1978												
05...	1000	1800	--	6.8	12.0	210000	--	32000	32000	60000	1200	--
STEUBEN COUNTY												
420428077443301 - QUINTETTE-STILLMAN NO 1 (LAT 42 04 28 LONG 077 44 33.01)												
JUN , 1978												
13...	--	990	--	5.2	--	9700	9700	3000	520	9200	120	33
13...	1200	1782	--	6.7	--	11000	11000	3400	600	9200	100	7
420428077443401 - QUINTETTE-STILLMAN NO 2 (LAT 42 04 28 LONG 077 44 34.01)												
JUL , 1978												
06...	--	350	340	8.5	--	13	0	3.6	1.0	70	2.2	160
06...	1200	1864	7500	6.6	--	1000	980	310	57	1300	32	42
420936077400801 - WELL NO H2 COLUMBIA GAS (LAT 42 09 36 LONG 077 40 08.01)												
MAR , 1978												
16...	1430	--	150000	--	--	150000	150000	50000	5200	62000	2300	80
421013077395301 - WELL NO H23d COLUMBIA GAS (LAT 42 10 13 LONG 077 39 53.01)												
MAR , 1978												
16...	1415	--	150000	4.6	--	150000	150000	50000	5200	62000	2200	62
421100077050001 - CASS WELL NO 1 JVP EXPLO (LAT 42 11 00 LONG 077 05 00.01)												
MAY , 1978												
10...	1230	--	--	4.4	--	390000	--	54000	60000	5700	2000	--

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978--Continued

DATE	ALKALINITY (MG/L AS CACO3)	SULFIDE DISSOLVED (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	BARIUM, DISSOLVED (UG/L AS BA)	BROMIDE DISSOLVED (MG/L AS BR)	LITHIUM DISSOLVED (UG/L AS LI)	STRONTIUM, DISSOLVED (UG/L AS SR)
CATTARAUGUS COUNTY--Continued												
421021078001201 - RAMSEY WELL COLUMBIA GAS (LAT 42 10 21 LONG 078 00 12.01)												
MAR , 1978												
16...	0	--	640	210000	1.0	15	328000	.09	20000	--	160000	2300000
CHAUTAUQUA COUNTY--Continued												
422134079200701 - WELL NO 56 PARAGON RESOURCE (LAT 42 21 34 LONG 079 20 07.01)												
MAY , 1978												
04...	--	.0	850	130000	--	--	--	--	10000	--	43000	600000
422227079190001 - WELL NO 9 PARAGON RESOURCE (LAT 42 22 27 LONG 079 19 00.01)												
MAY , 1978												
04...	--	.0	950	150000	--	--	--	--	10000	--	52000	640000
422734079182201 - GEYBEN WELL J AND L WELL SERVICES (LAT 42 27 34 LONG 079 18 22.01)												
MAY , 1978												
05...	--	.0	1200	170000	--	--	--	--	10000	--	60000	82000
422743079180001 - DACH WELL J AND L WELL SERVICES (LAT 42 27 43 LONG 079 18 00.01)												
MAY , 1978												
05...	--	.0	1300	170000	--	--	--	--	10000	--	57000	620000
STEUBEN COUNTY--Continued												
420428077443301 - QUINTETTE-STILLMAN NO 1 (LAT 42 04 28 LONG 077 44 33.01)												
JUN , 1978												
13...	27	--	400	20000	--	--	--	--	4000	250	3700	40000
13...	6	--	400	22000	--	--	--	--	4000	250	4000	54000
420428077443401 - QUINTETTE-STILLMAN NO 2 (LAT 42 04 28 LONG 077 44 34.01)												
JUL , 1978												
06...	131	--	18	9.2	--	--	--	--	--	.4	--	--
06...	34	--	51	3000	--	--	--	--	800	36	720	4600
420936077400801 - WELL NO H2 COLUMBIA GAS (LAT 42 09 36 LONG 077 40 08.01)												
MAR , 1978												
16...	66	--	700	200000	1.1	15	324000	.09	40000	--	210000	3600000
421013077395301 - WELL NO H238 COLUMBIA GAS (LAT 42 10 13 LONG 077 39 53.01)												
MAR , 1978												
16...	51	--	600	200000	.3	20	324000	.08	40000	--	210000	3600000
421100077050001 - CASS WELL NO 1 JVP EXPLO (LAT 42 11 00 LONG 077 05 00.01)												
MAY , 1978												
10...	--	--	850	140000	--	--	--	--	30000	--	330000	4100000

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October 1, 1978

FACTORS FOR CONVERTING INCH-POUND UNITS TO INTERNATIONAL SYSTEM UNITS (SI)

The following factors may be used to convert the inch-pound units published herein to the International System of Units (SI). This report contains both the inch-pound and SI unit equivalents in the station manuscript descriptions.

Multiply inch-pound units	By	To obtain SI units
	Length	
inches (in)	2.54×10^{1}	millimeters (mm)
	2.54×10^{-2}	meters (m)
feet (ft)	3.048×10^{-1}	meters (m)
miles (mi)	1.609×10^{0}	kilometers (km)
	Area	
acres	4.047×10^{3}	square meters (m^2)
	4.047×10^{-1}	square hectometers (hm^2)
	4.047×10^{-3}	square kilometers (km^2)
square miles (mi^2)	2.590×10^{0}	square kilometers (km^2)
	Volume	
gallons (gal)	3.785×10^{0}	liters (L)
	3.785×10^{0}	cubic decimeters (dm^3)
	3.785×10^{-3}	cubic meters (m^3)
million gallons	3.785×10^{3}	cubic meters (m^3)
	3.785×10^{-3}	cubic hectometers (hm^3)
cubic feet (ft^3)	2.832×10^{1}	cubic decimeters (dm^3)
	2.832×10^{-2}	cubic meters (m^3)
cfs-days	2.447×10^{3}	cubic meters (m^3)
	2.447×10^{-3}	cubic hectometers (hm^3)
acre-feet (acre-ft)	1.233×10^{3}	cubic meters (m^3)
	1.233×10^{-3}	cubic hectometers (hm^3)
	1.233×10^{-6}	cubic kilometers (km^3)
	Flow	
cubic feet per second (ft^3/s)	2.832×10^{1}	liters per second (L/s)
	2.832×10^{1}	cubic decimeters per second (dm^3/s)
	2.832×10^{-2}	cubic meters per second (m^3/s)
gallons per minute (gal/min)	6.309×10^{-2}	liters per second (L/s)
	6.309×10^{-2}	cubic decimeters per second (dm^3/s)
	6.309×10^{-5}	cubic meters per second (m^3/s)
million gallons per day	4.381×10^{1}	cubic decimeters per second (dm^3/s)
	4.381×10^{-2}	cubic meters per second (m^3/s)
	Mass	
tons (short)	9.072×10^{-1}	megagrams (Mg) or metric tons